

Figure 1

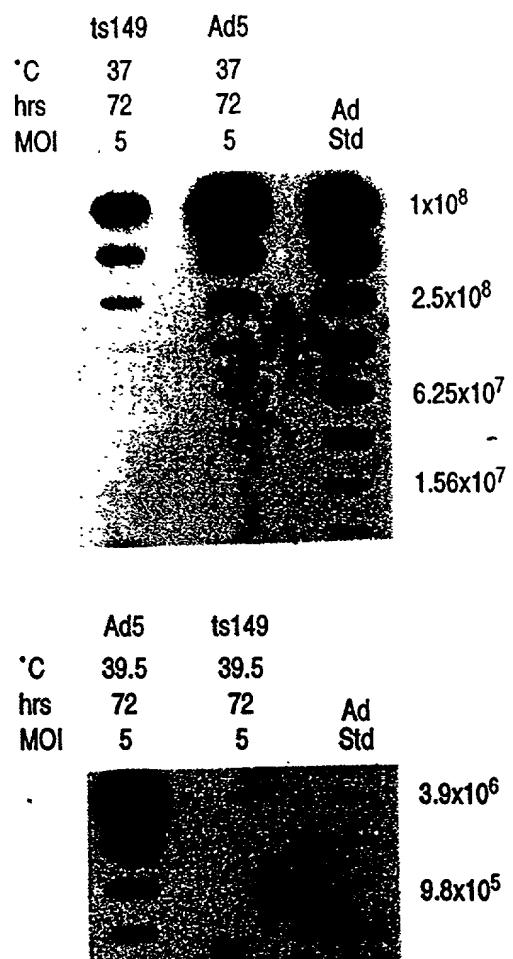


Figure 2

| ts149 | Ad5 | ts149 | 'C |
|-------|-----|-------|-----|
| 39.5 | 37 | 39.5 | hrs |
| 72 | | 72 | |
| 5 | 10 | 20 | 40 |
| | | | |
| 5 | 5 | 5 | MOI |



Figure 3

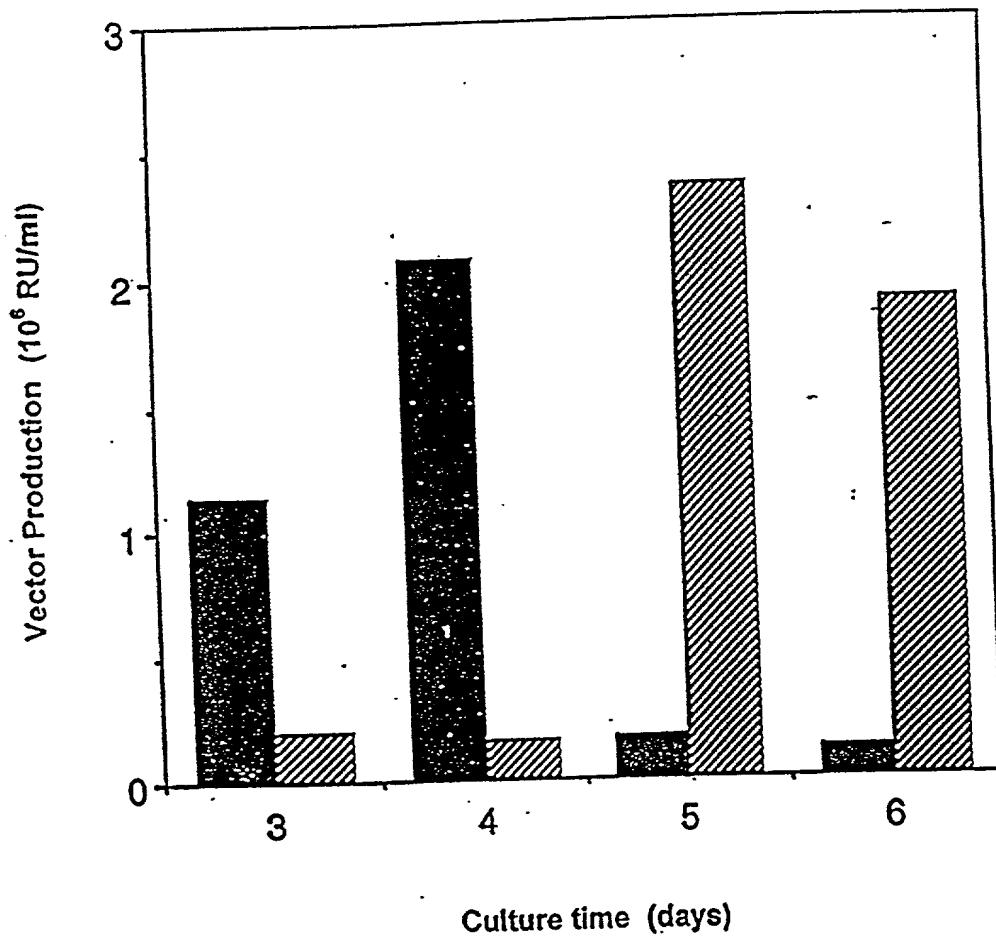


Figure 4

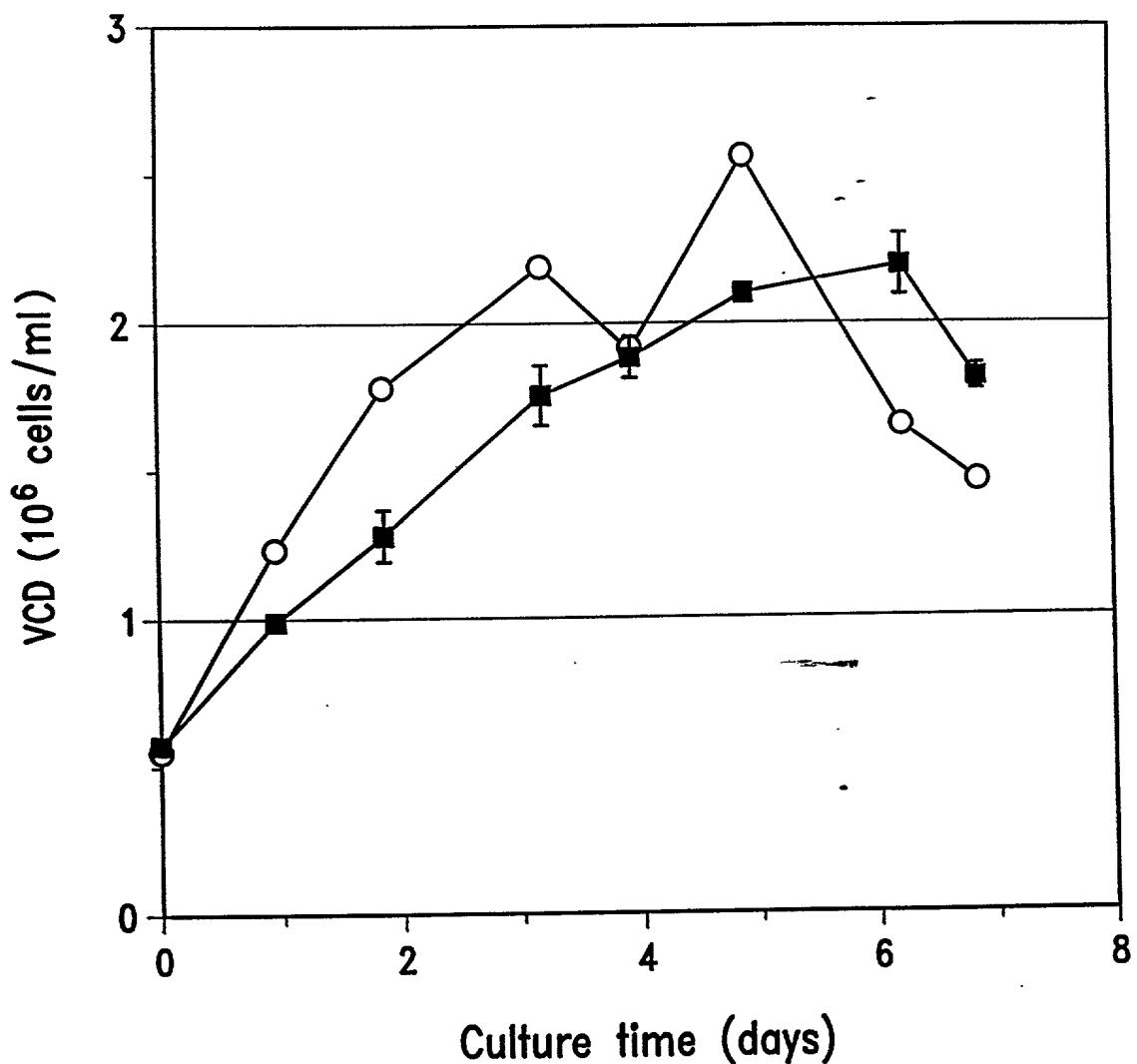


Figure 5

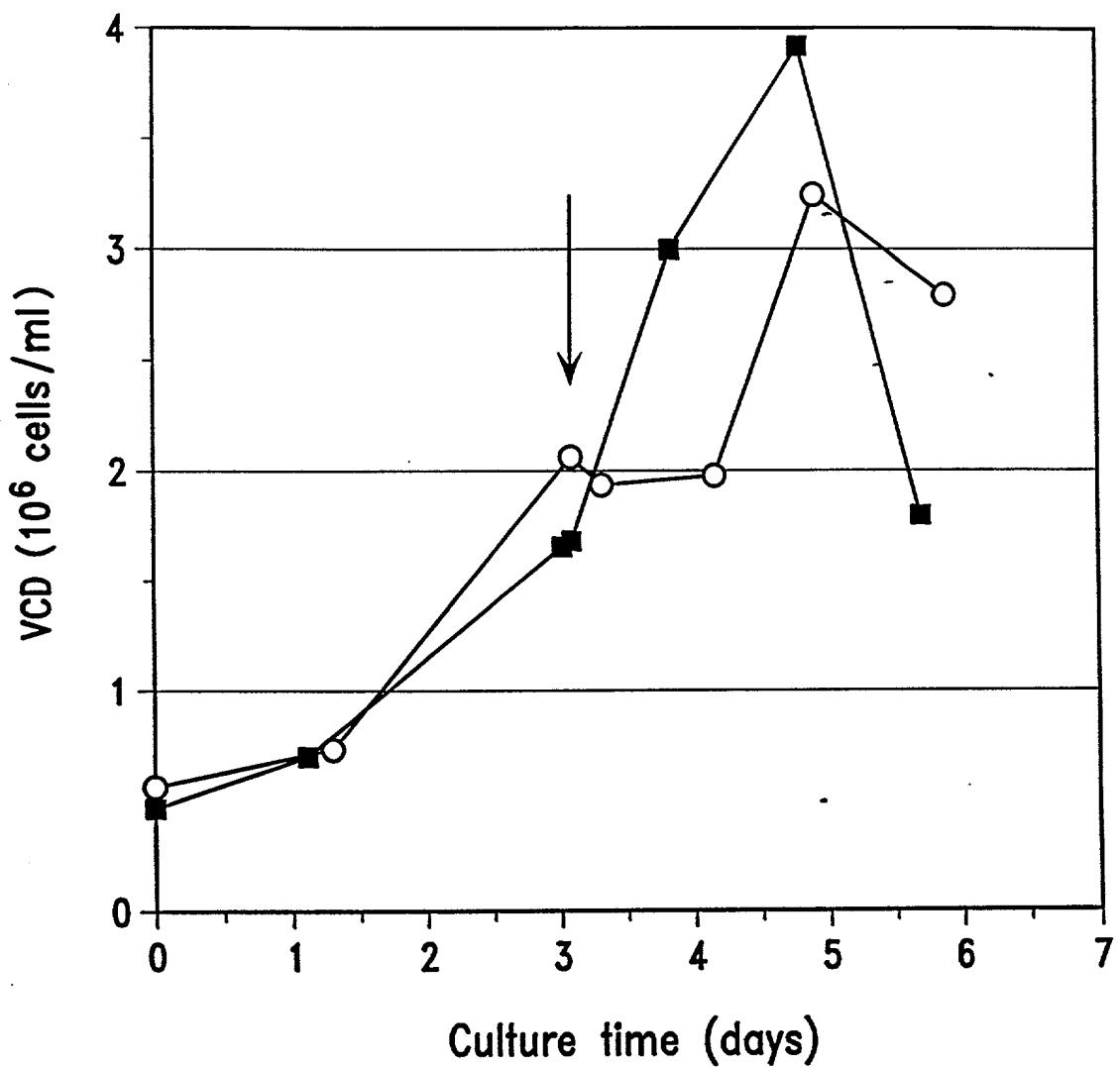


Figure 6

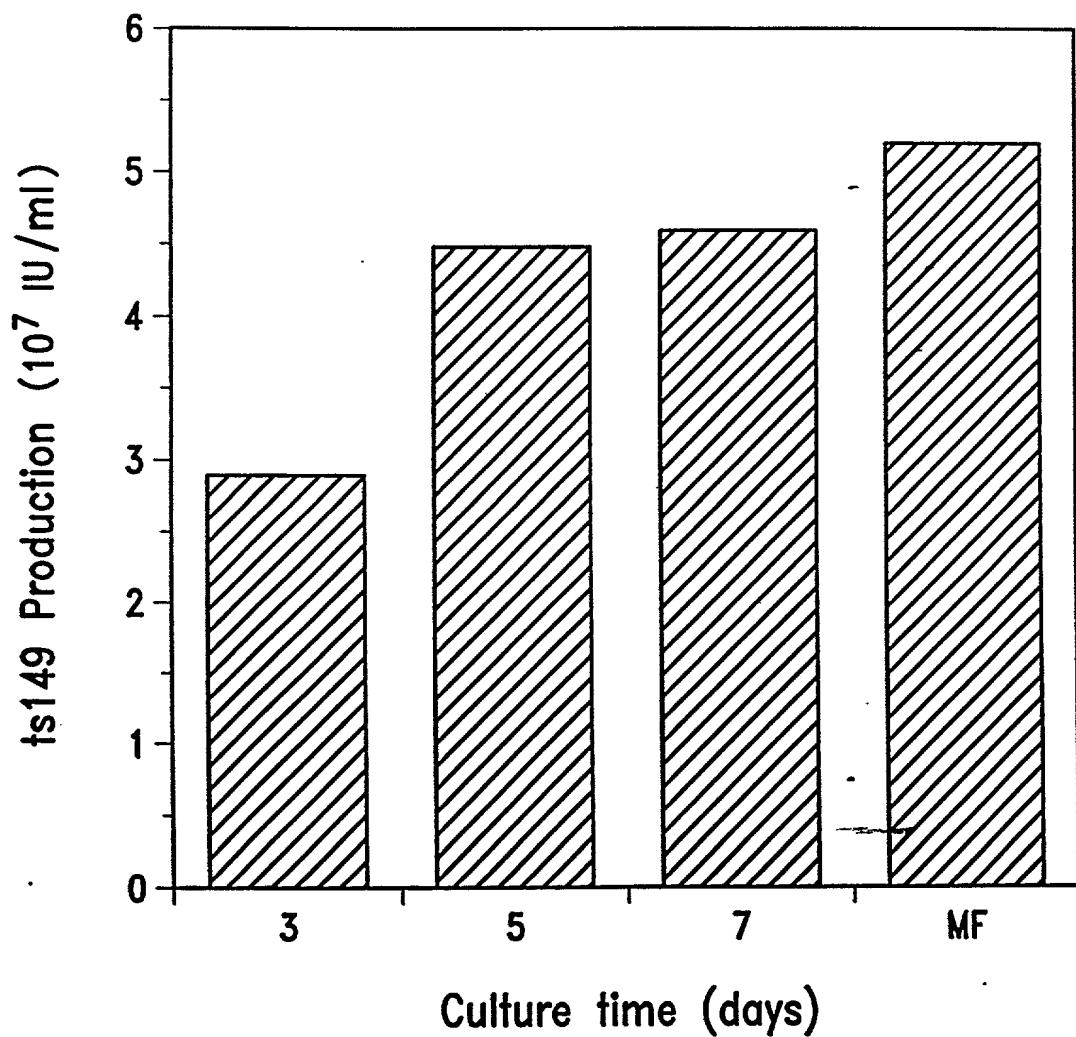


Figure 7

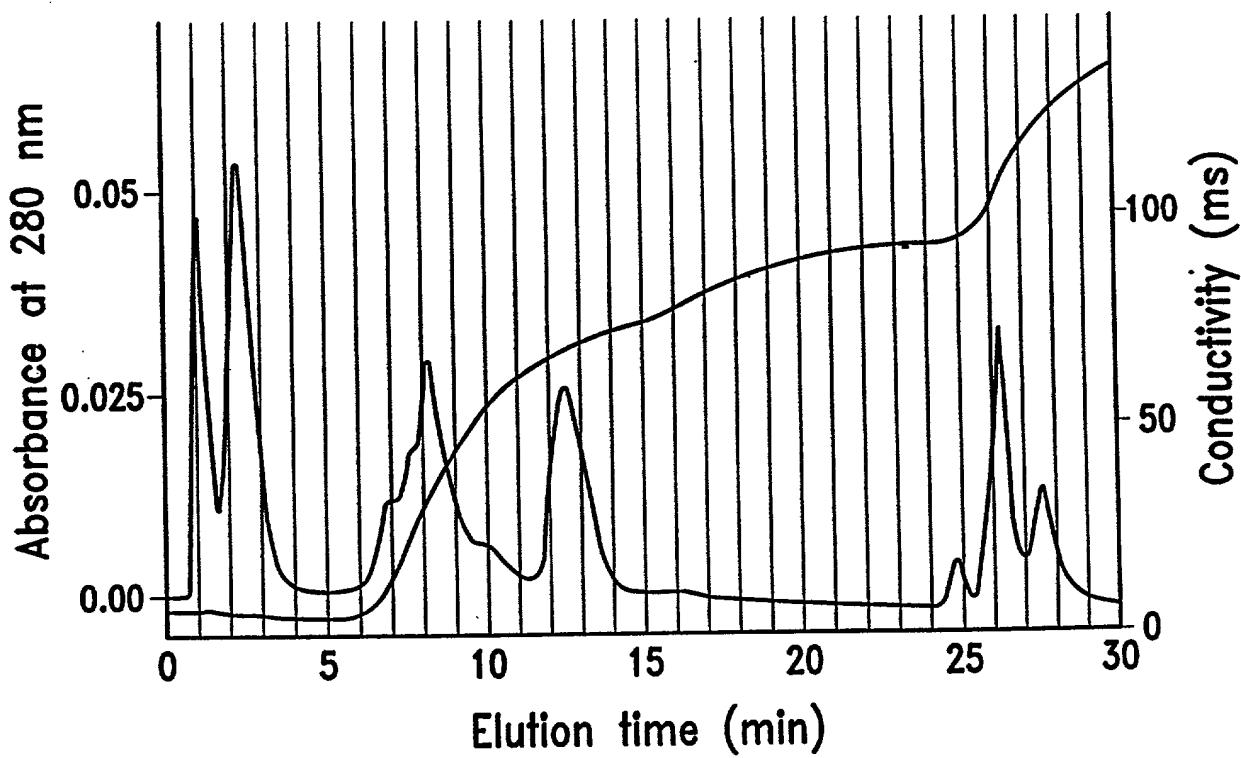
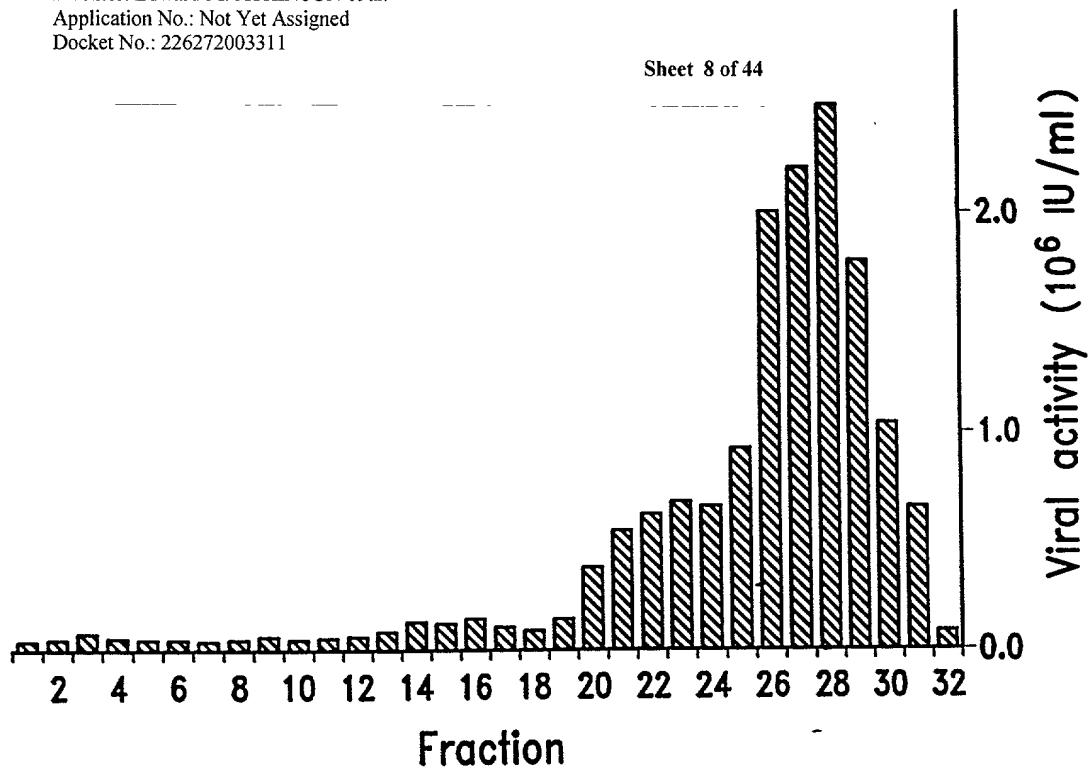


Figure 8

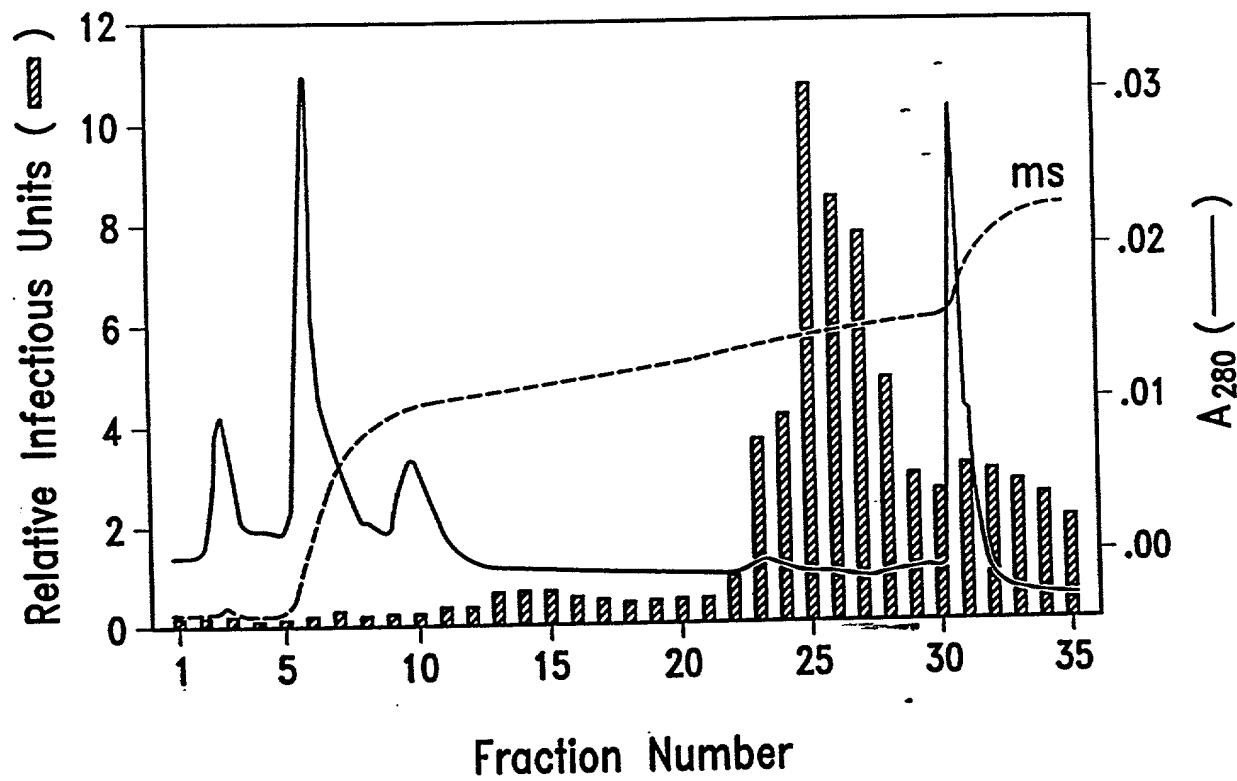


Figure 9

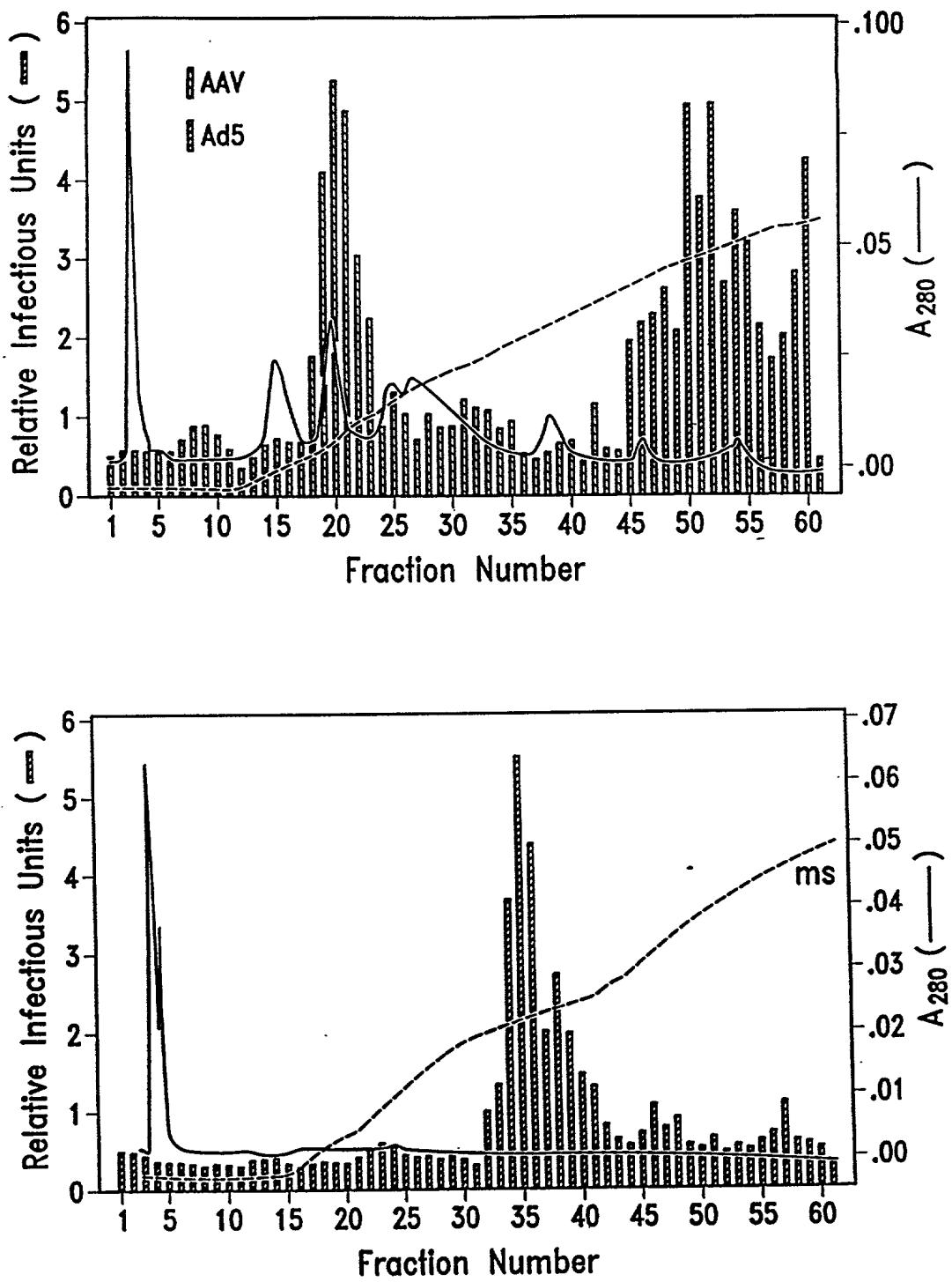


Figure 10

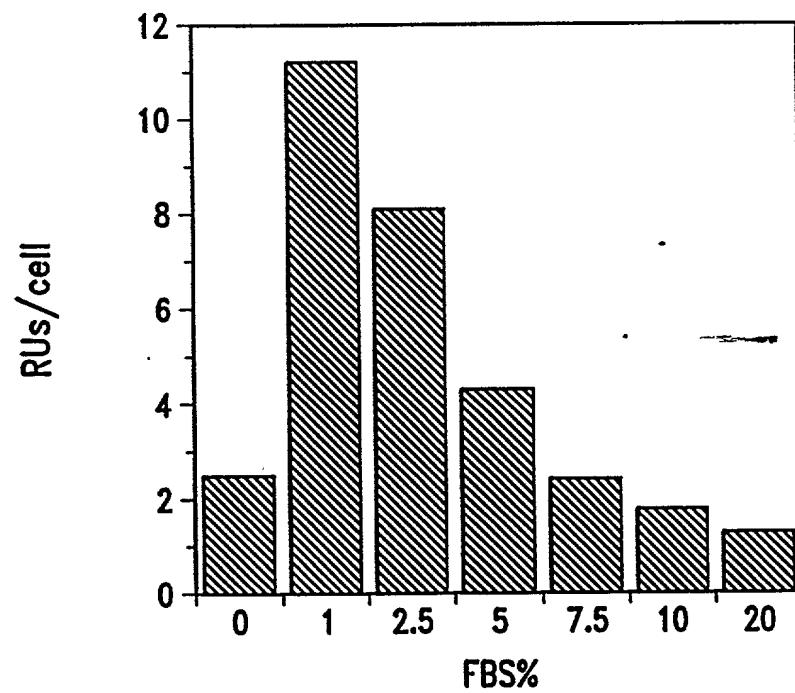
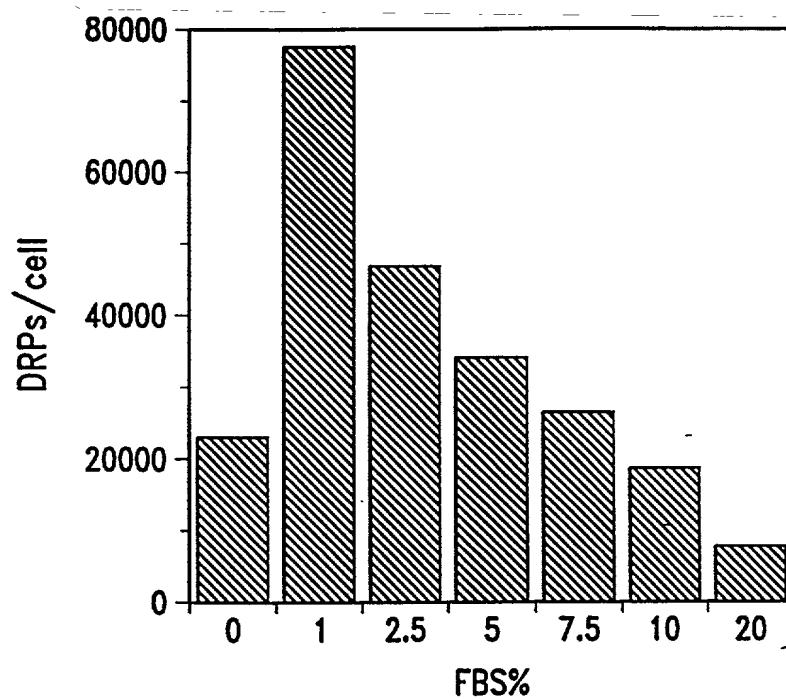


Figure 11

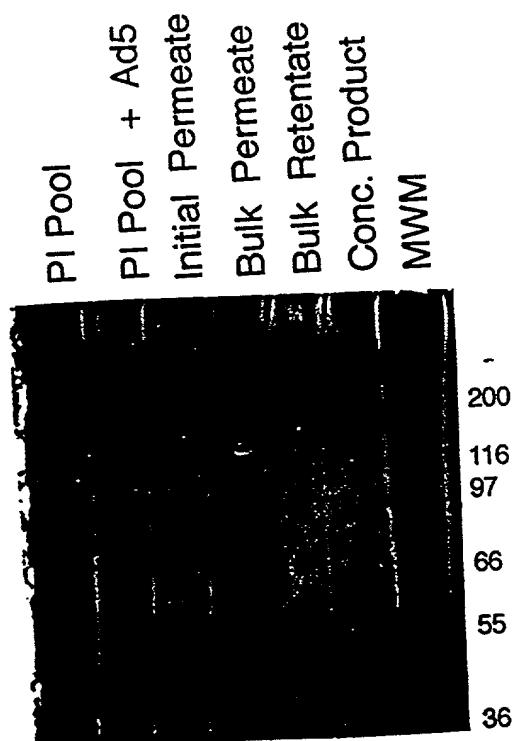


Figure 12

52471c2.bio - 2000.0 μ l 1:AAV FILTR

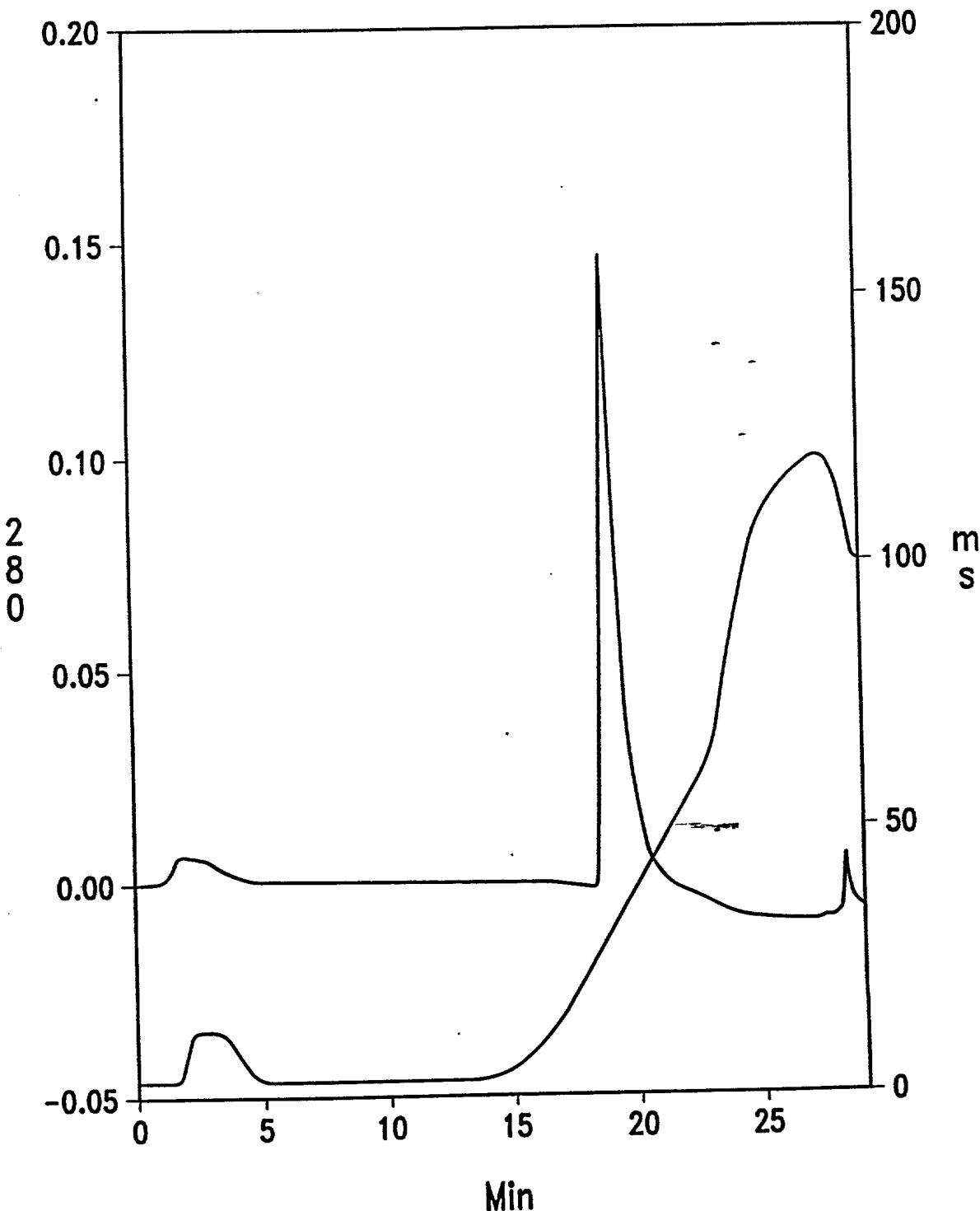
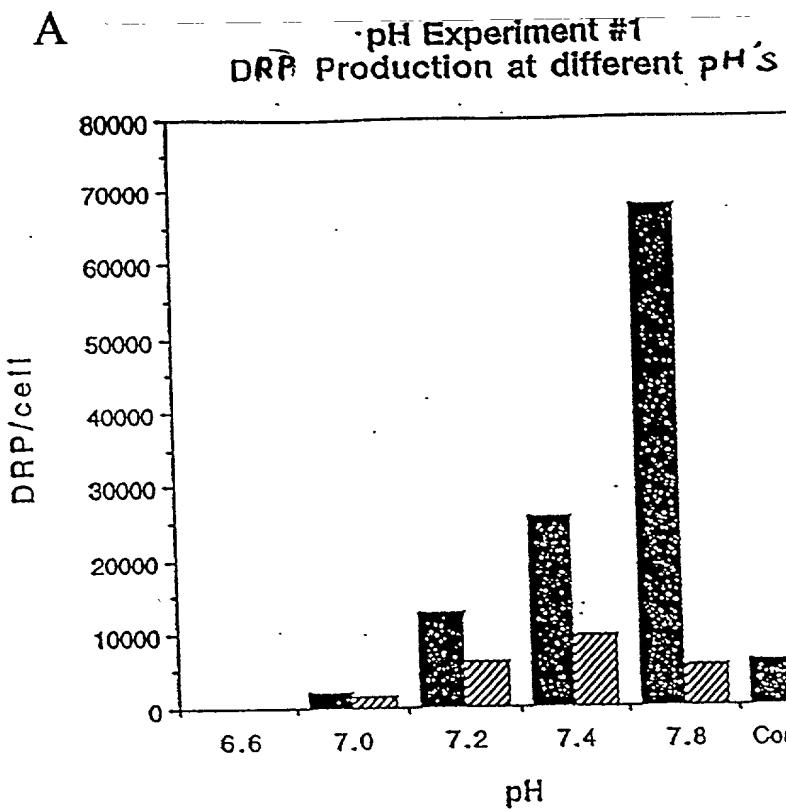


Figure 13

A



B

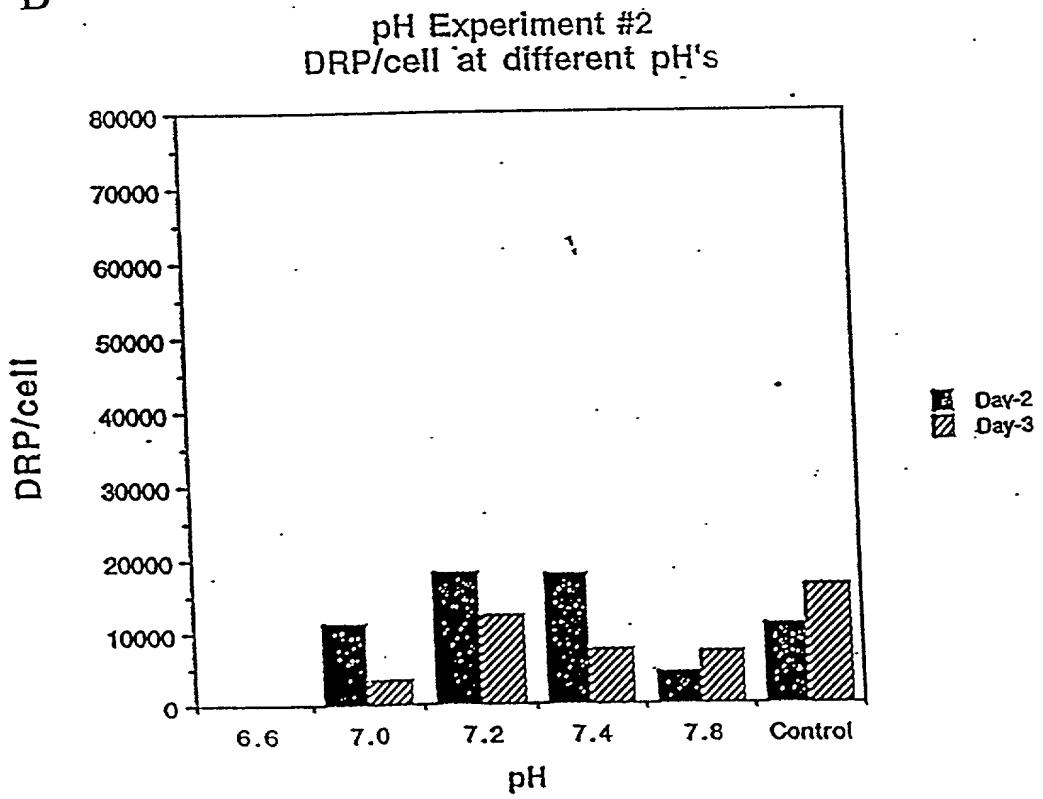
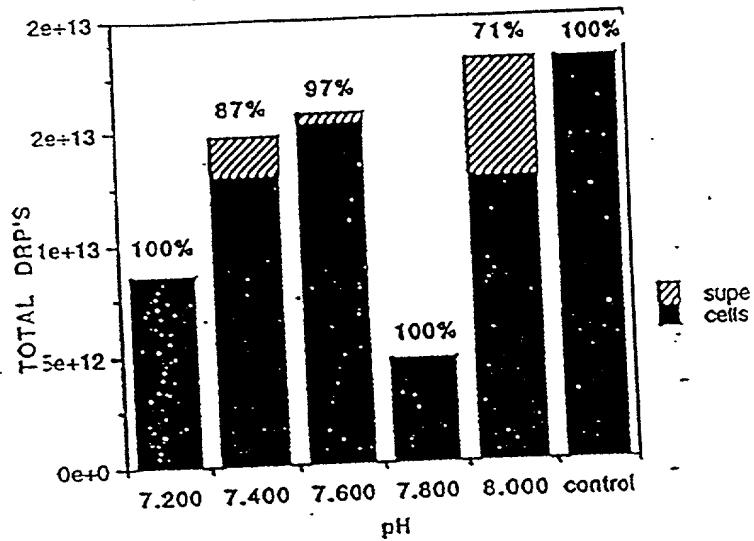


Figure 14

A

CFTR JL-14 REACTOR pH EXPERIMENT #3
DISTRIBUTION OF VECTOR IN CELLS/SUPE
TOTAL CULTURE DRP'S DAY 2



B

CFTR JL-14 REACTOR pH EXPERIMENT #3
DISTRIBUTION OF VECTOR IN CELLS/SUPE
TOTAL CULTURE DRP'S DAY 3

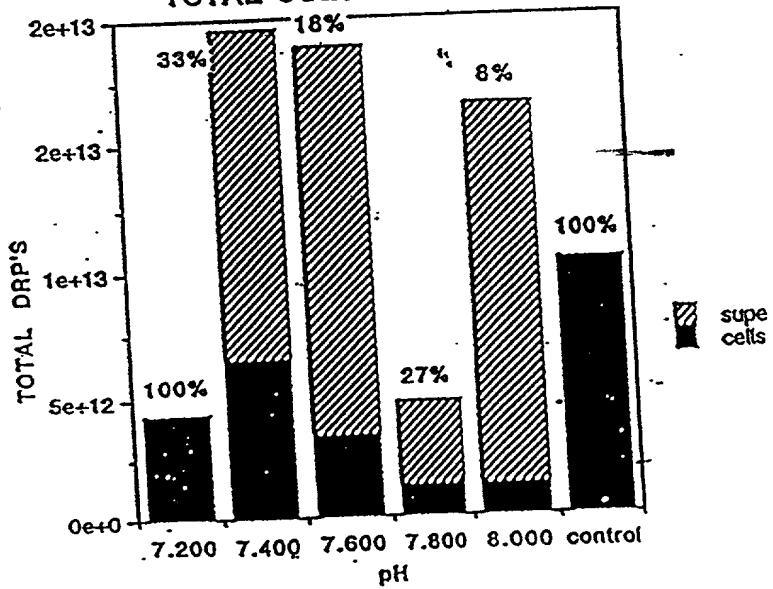
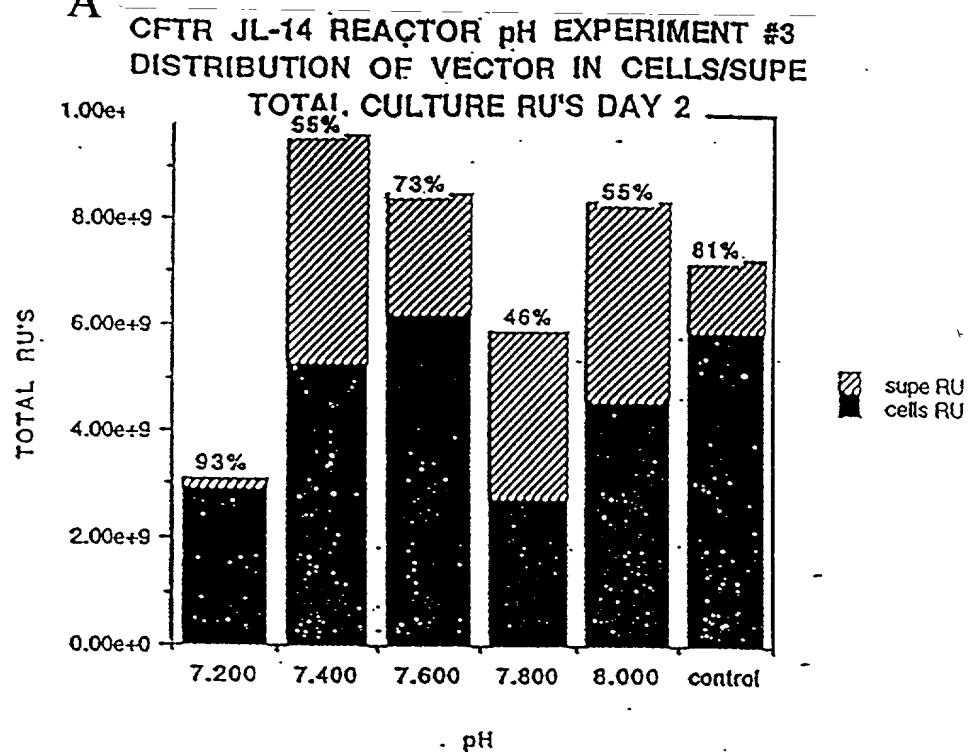


Figure 15

A



B

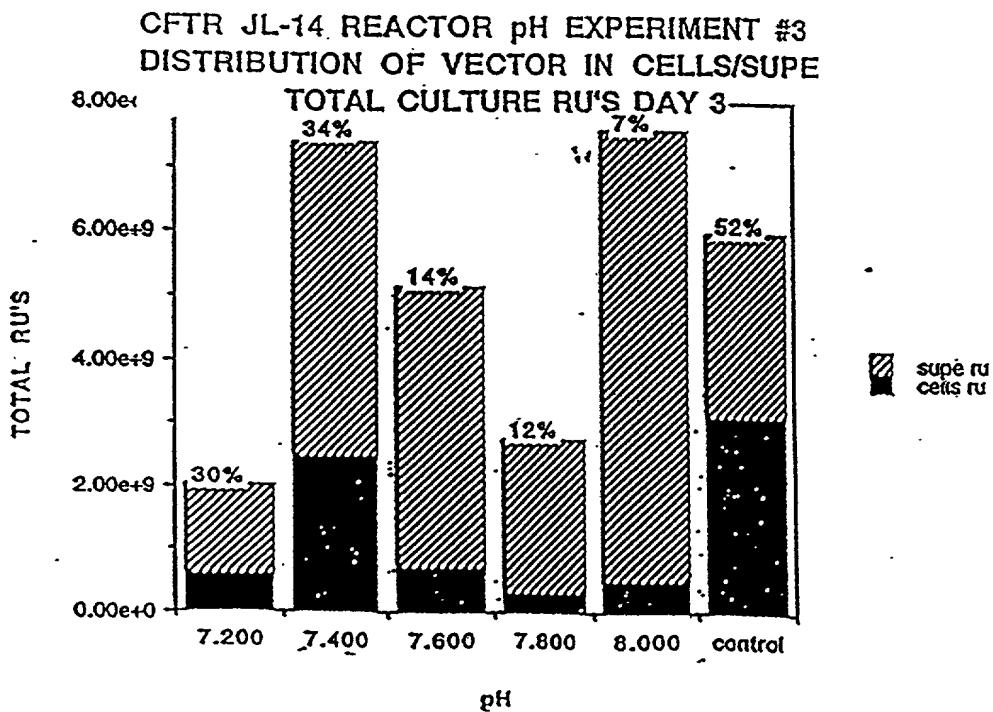


Figure 16

CFTR JL-14 REACTOR pH EXPERIMENT #3
DAY 3 PARTICLE TO INFECTIVITY
SUPERNATANT AND CELLS

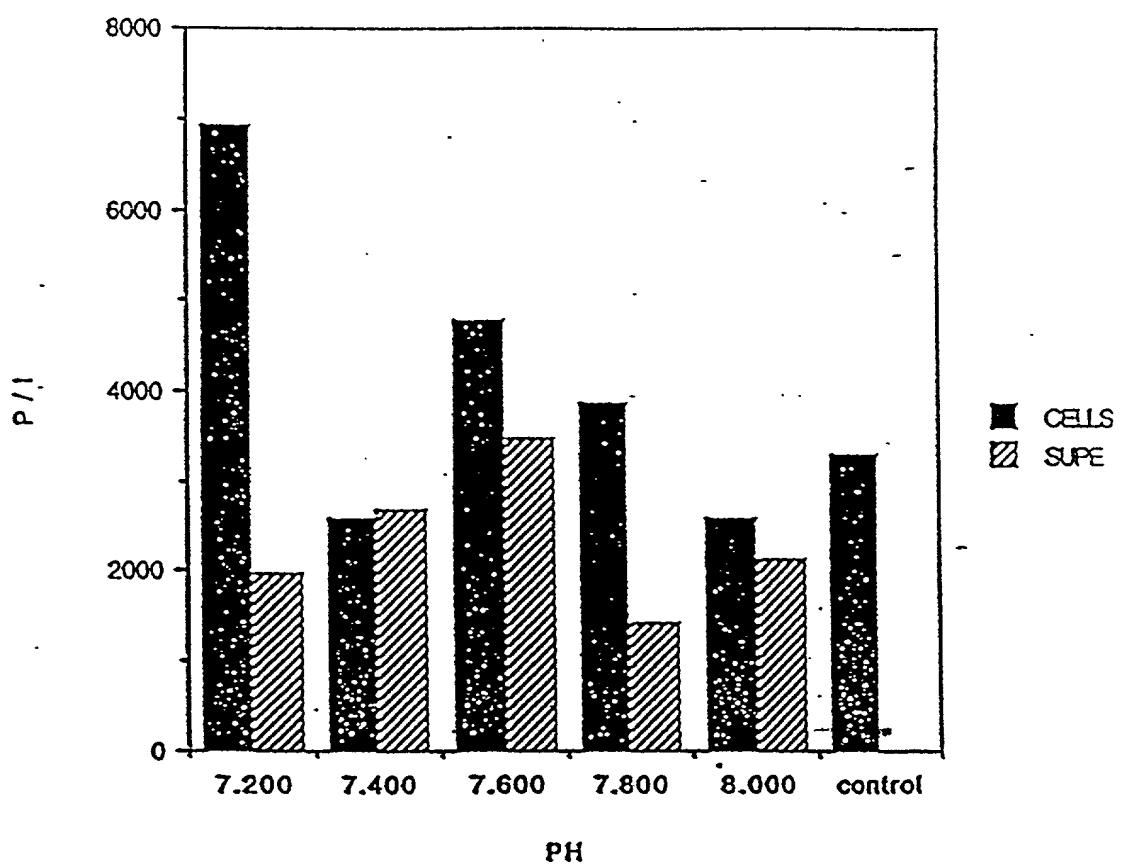
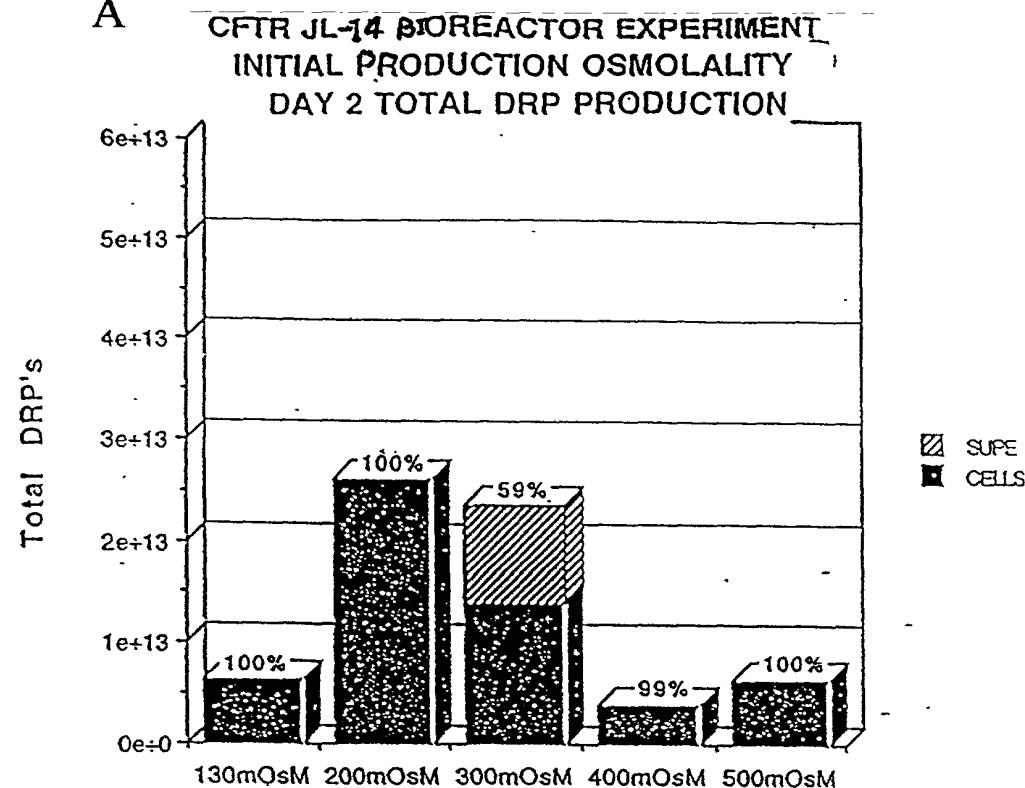


Figure 17

A



B

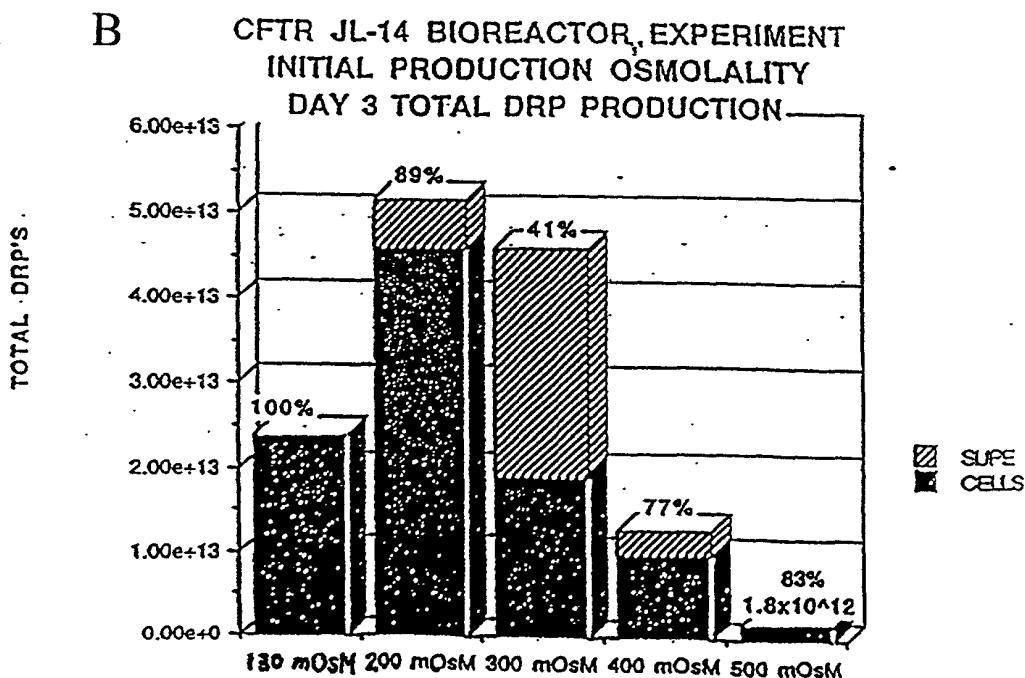


Figure 18

CFTR JL-14 BIOREACTOR EXPERIMENT
INITIAL PRODUCTION OSMOLALITY
DAY 4 TOTAL DRP PRODUCTION

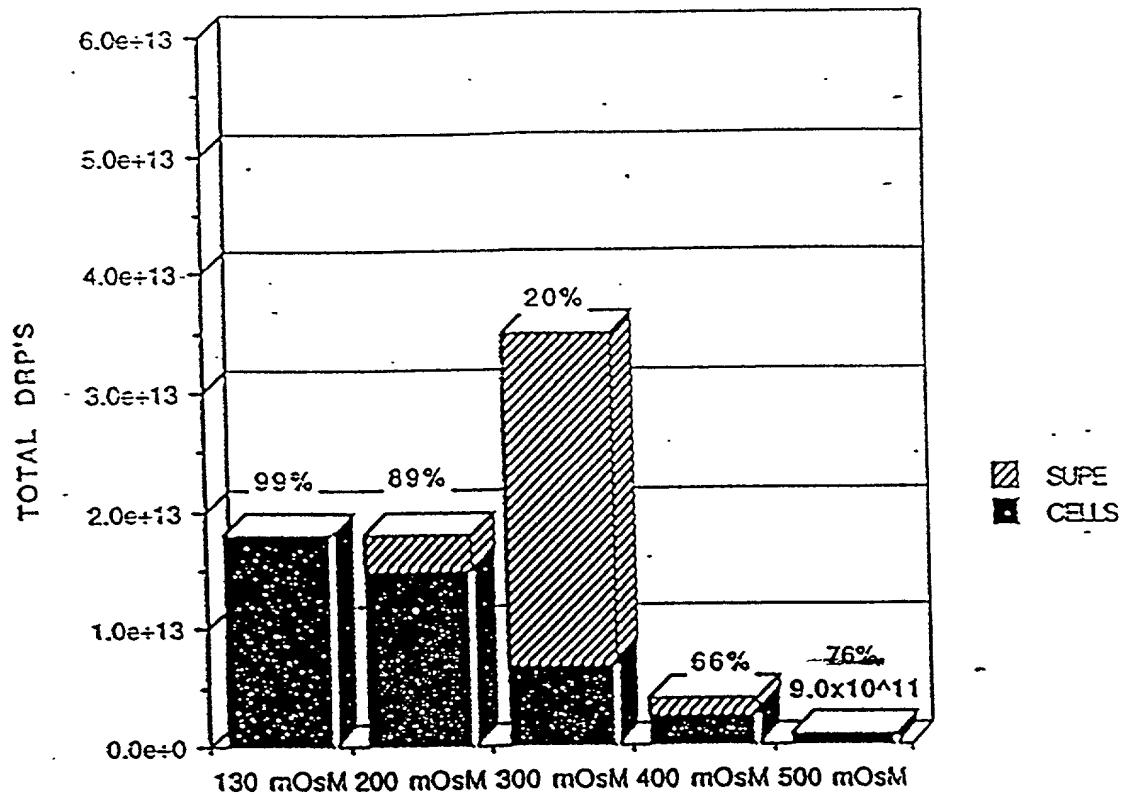
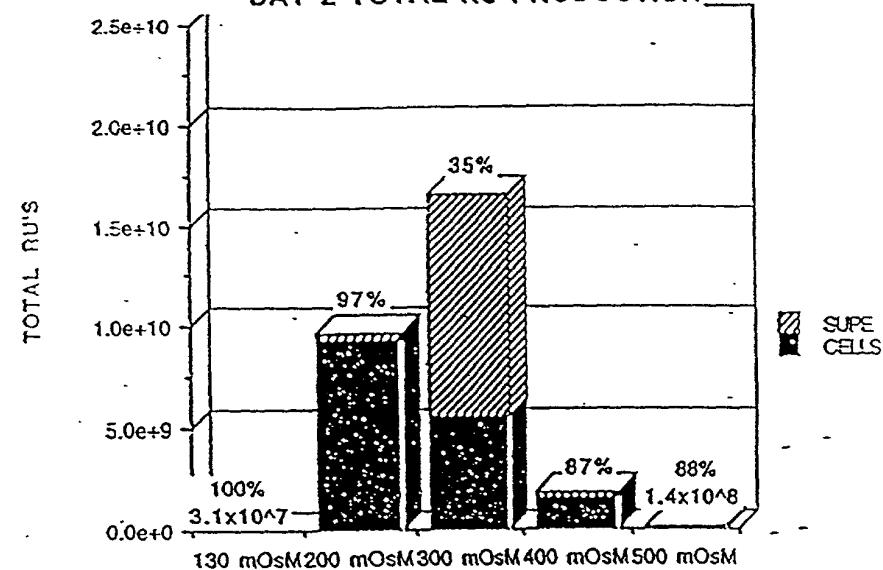


Figure 18C

A CFTR JL-14 BIOREACTOR EXPERIMENT
INITIAL PRODUCTION OSMOLALITY
DAY 2 TOTAL RU PRODUCTION



B CFTR JL-14 BIOREACTOR EXPERIMENT
INITIAL PRODUCTION OSMOLALITY
DAY 3 TOTAL RU PRODUCTION

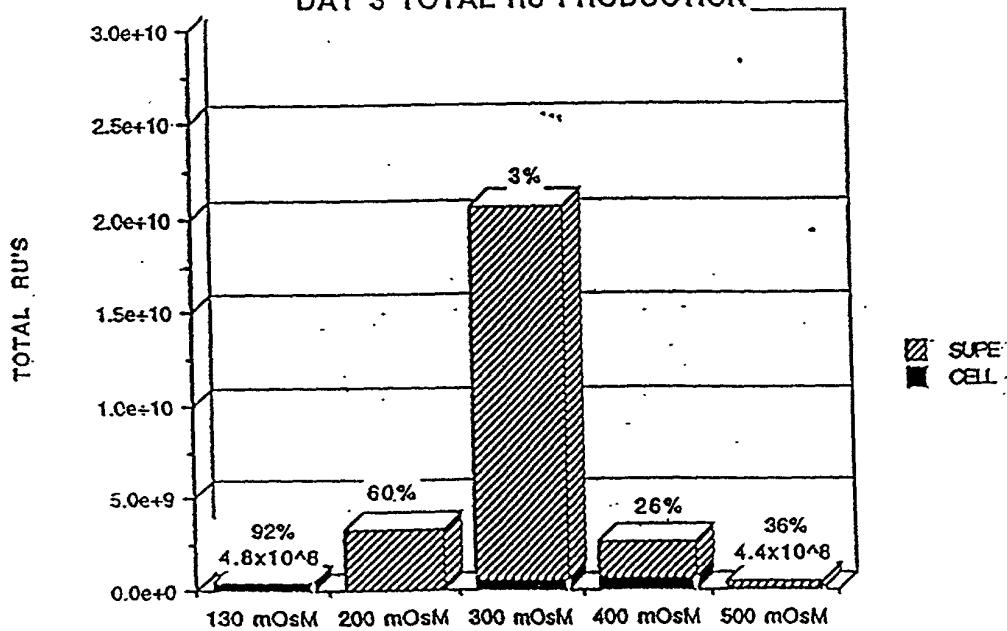


Figure 19

CFTR JL-14 BIOREACTOR EXPERIMENT
INITIAL PRODUCTION OSMOLALITY
DAY 4 TOTAL RU PRODUCTION

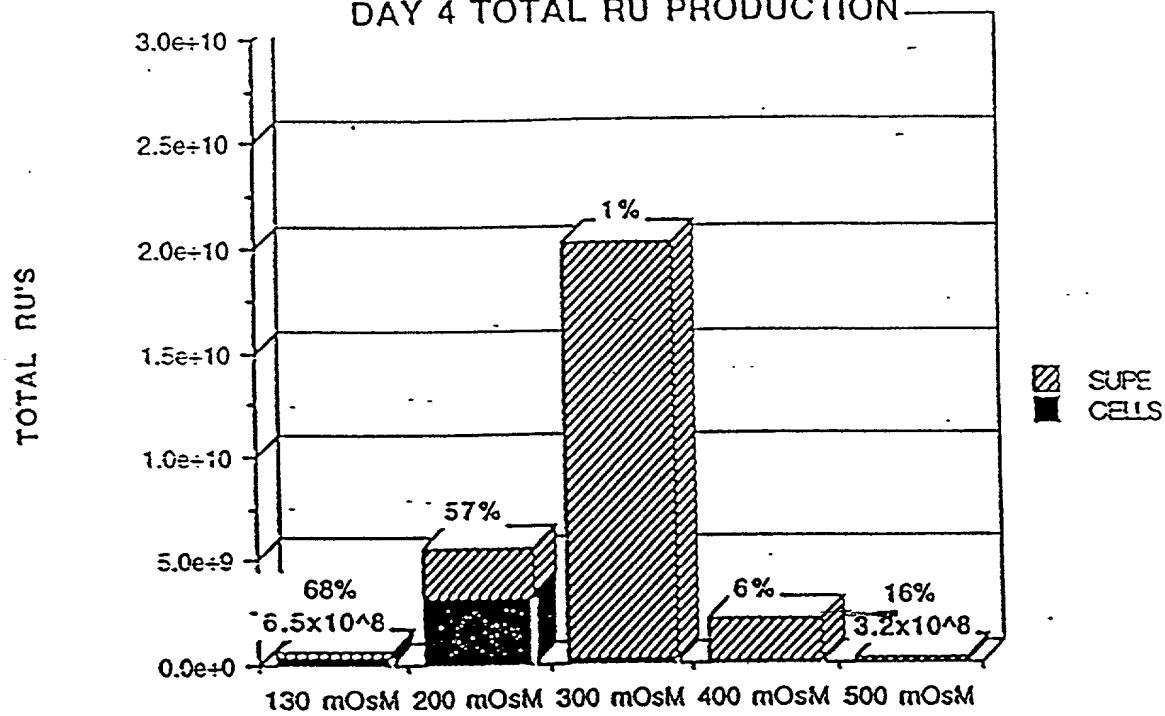


Figure 19C

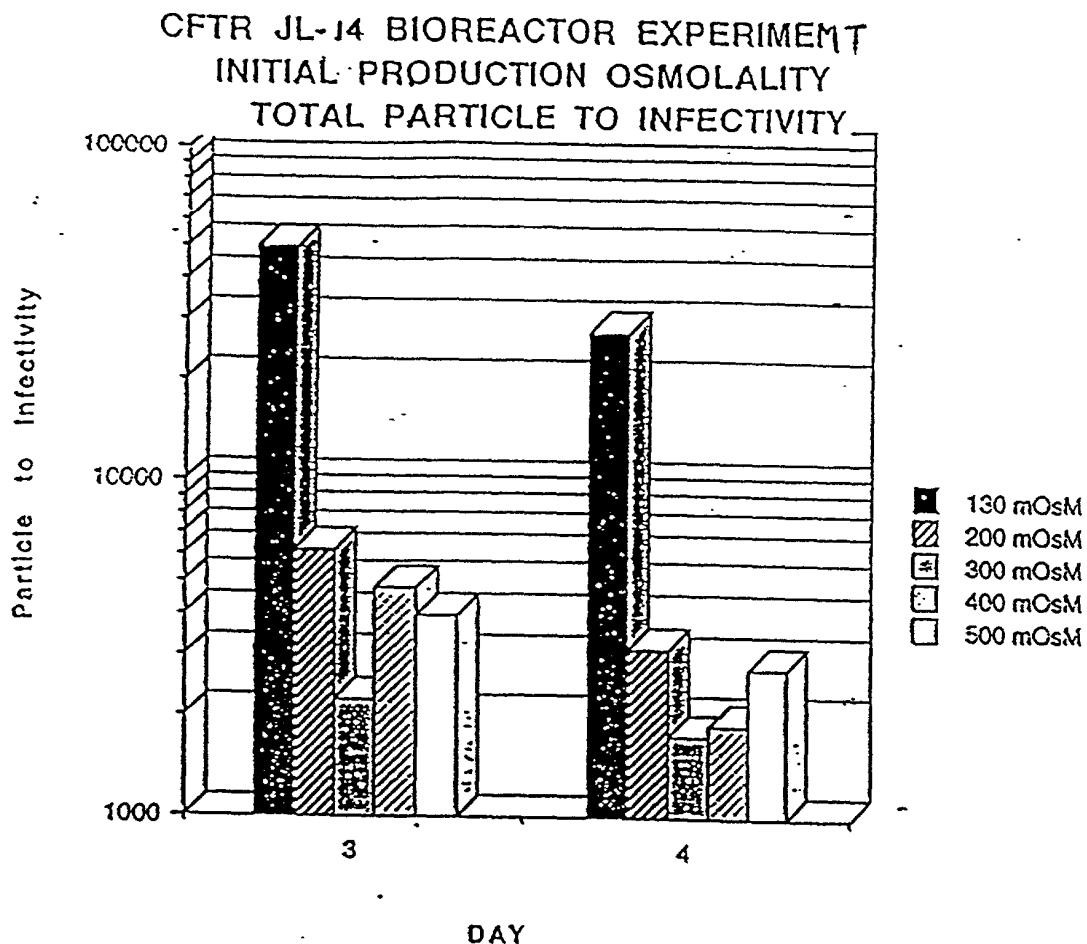
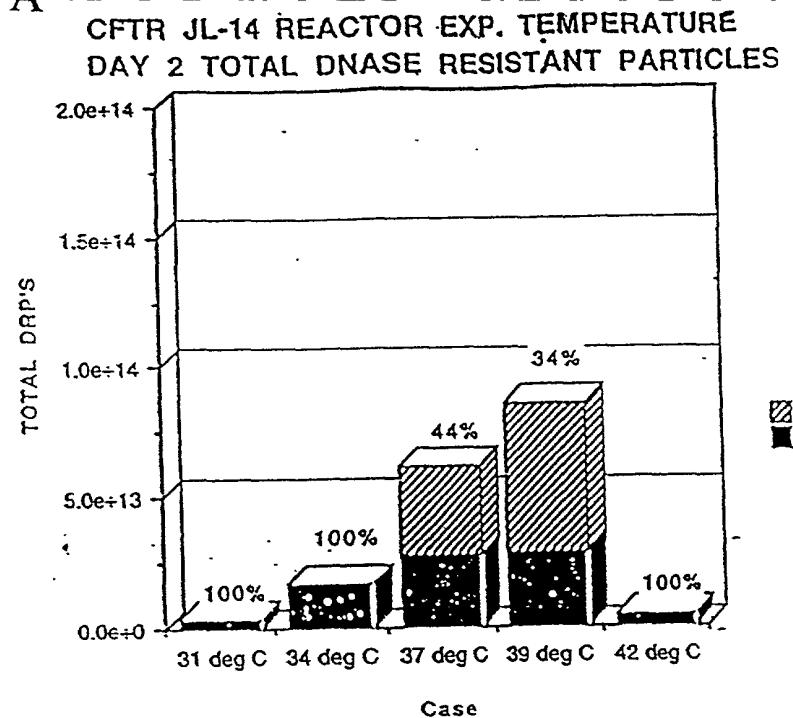


Figure 20

A



B

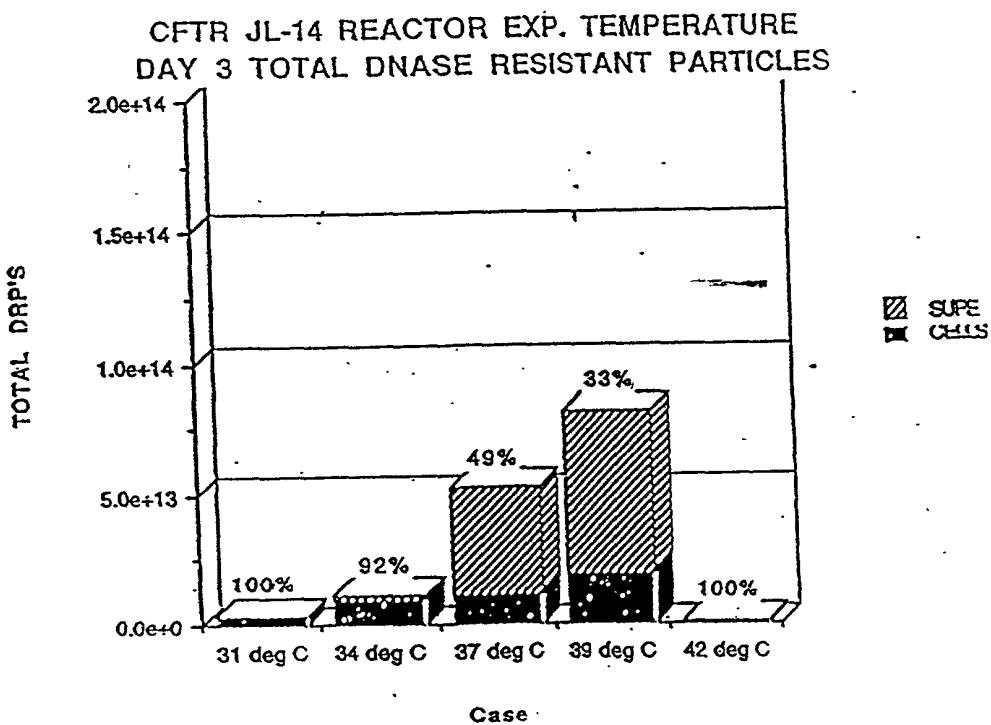


Figure 21

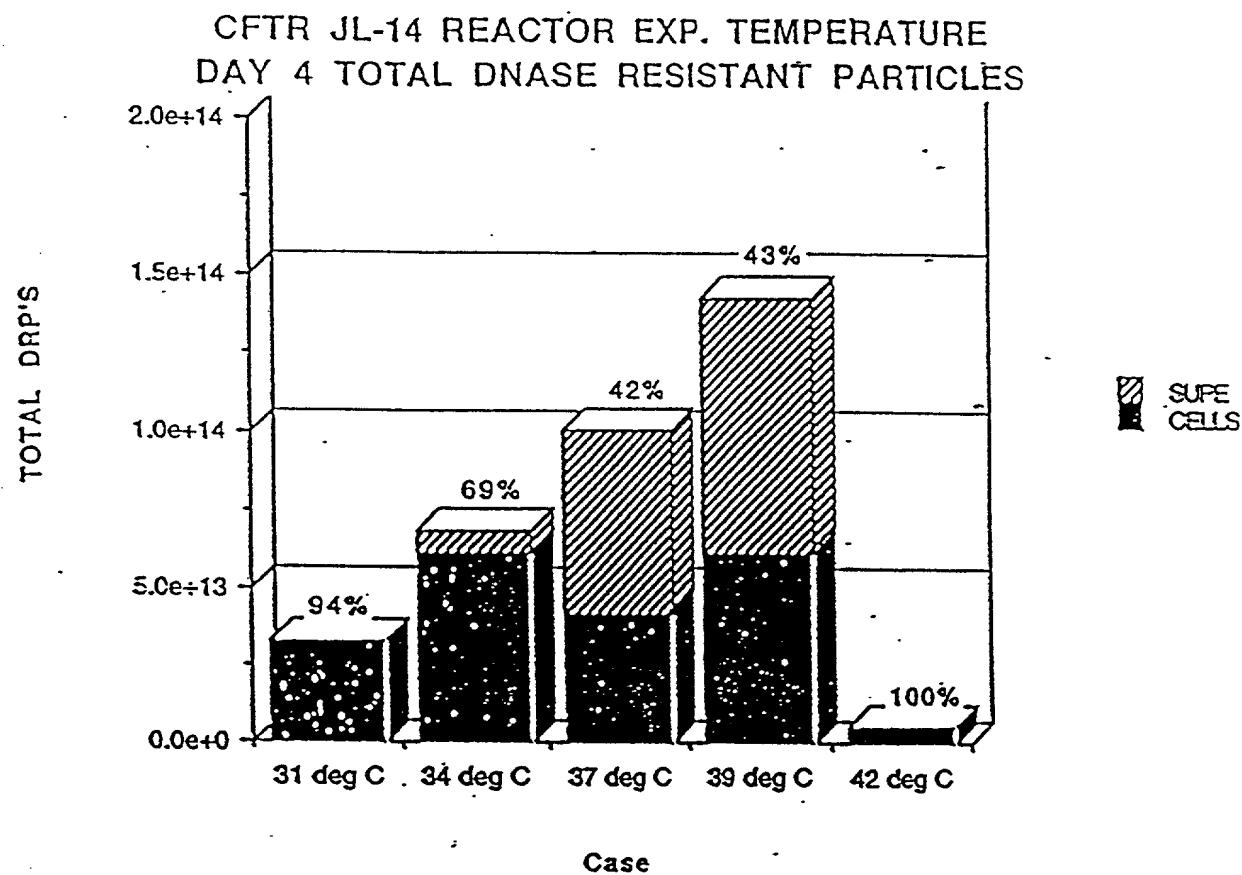


Figure 21C

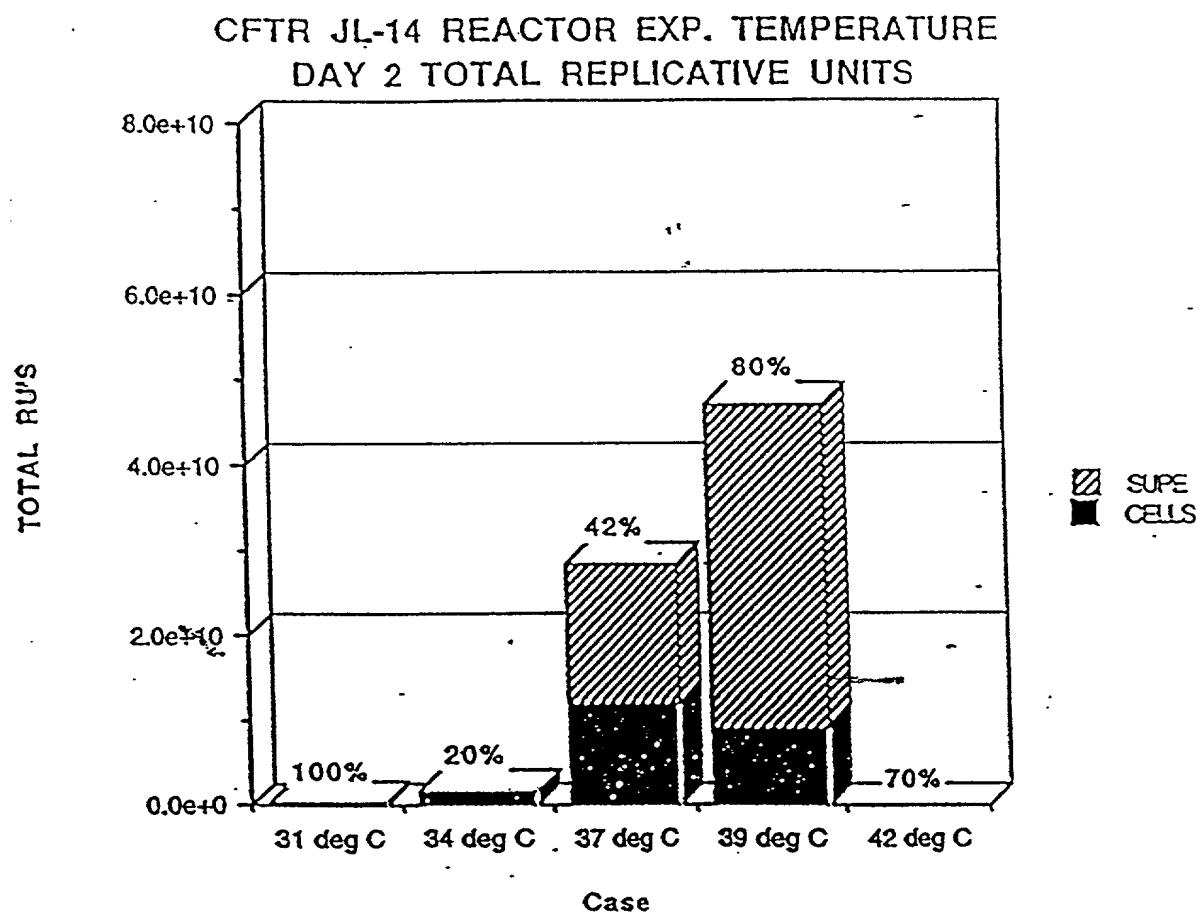
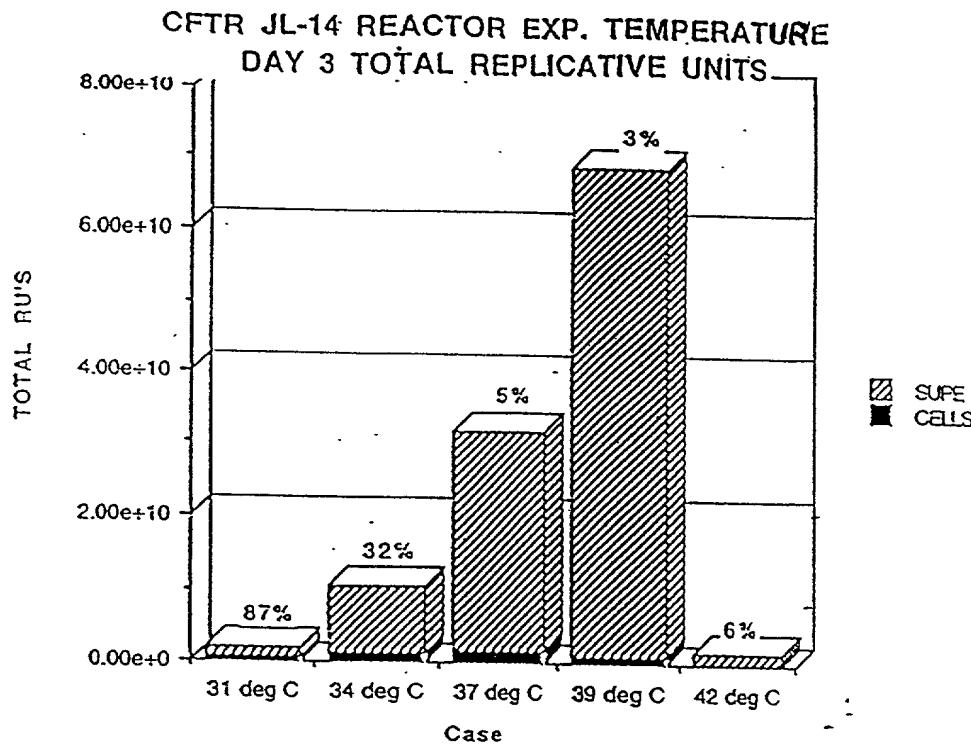
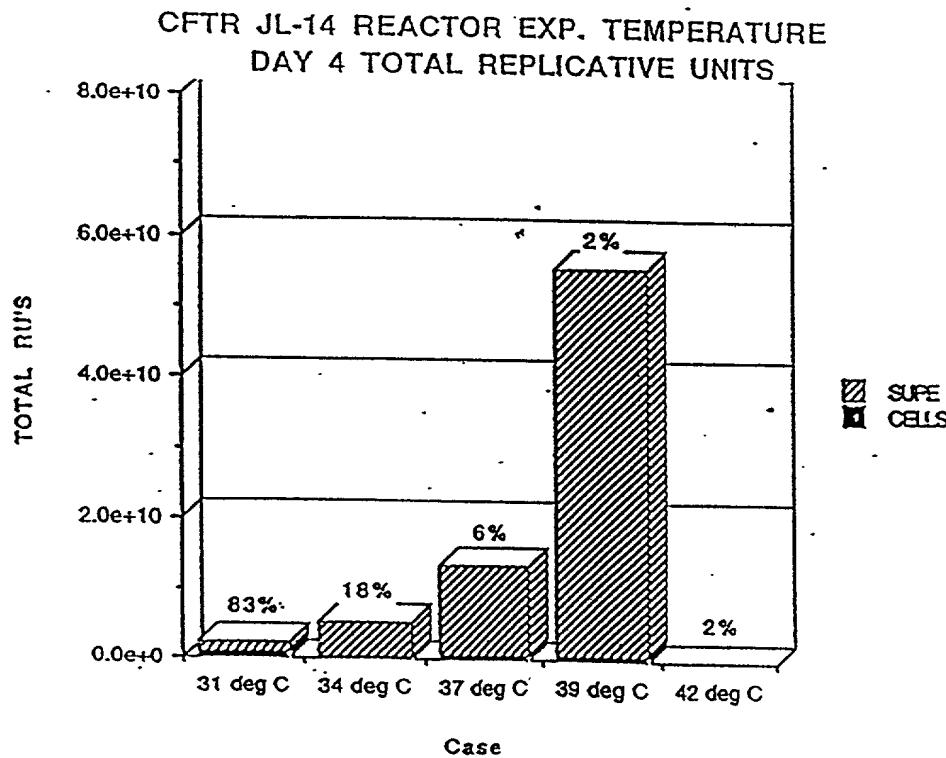


Figure 22A

B



C



Figures 22B and 22C

CFTR JL-14 Feed Experiment II
Total DRP's - Day 3 Supe

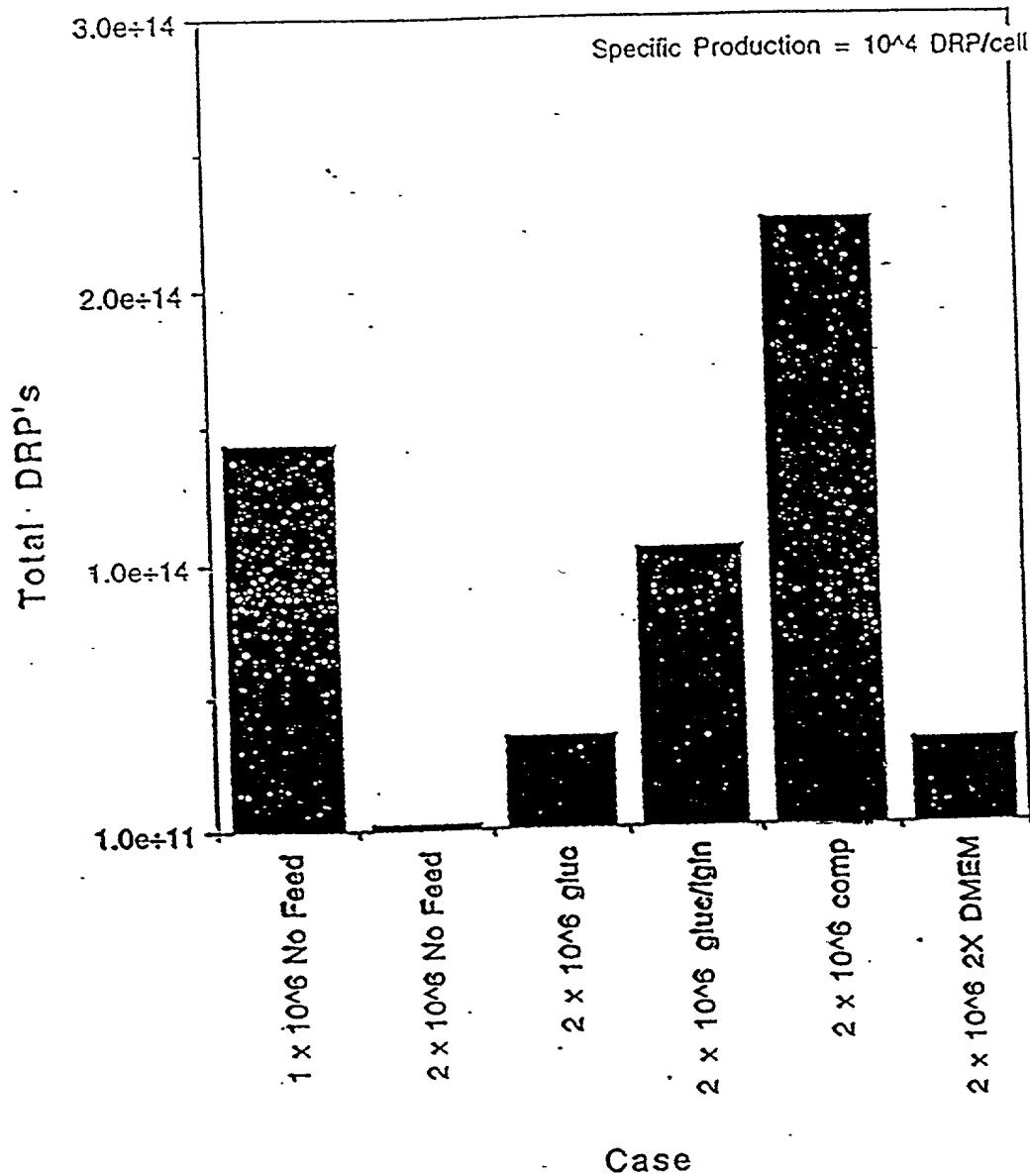


Figure 23

CFTR JL-14 Feed Experiment II
Total RU's - Day 3 Supe

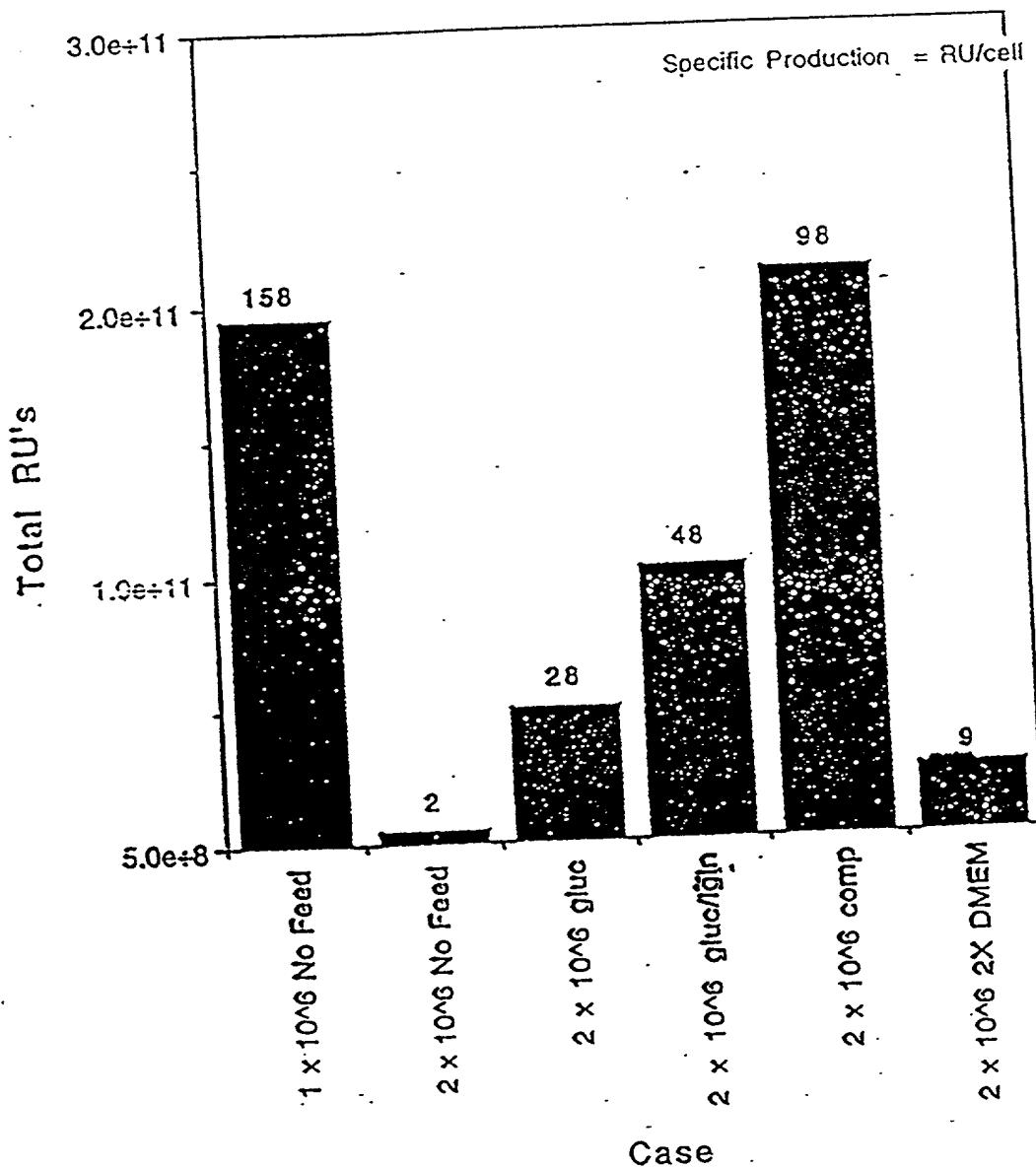


Figure 24

CFTR JL-14 Feed Experiment II.
P/I ratio - Day 3 Supe

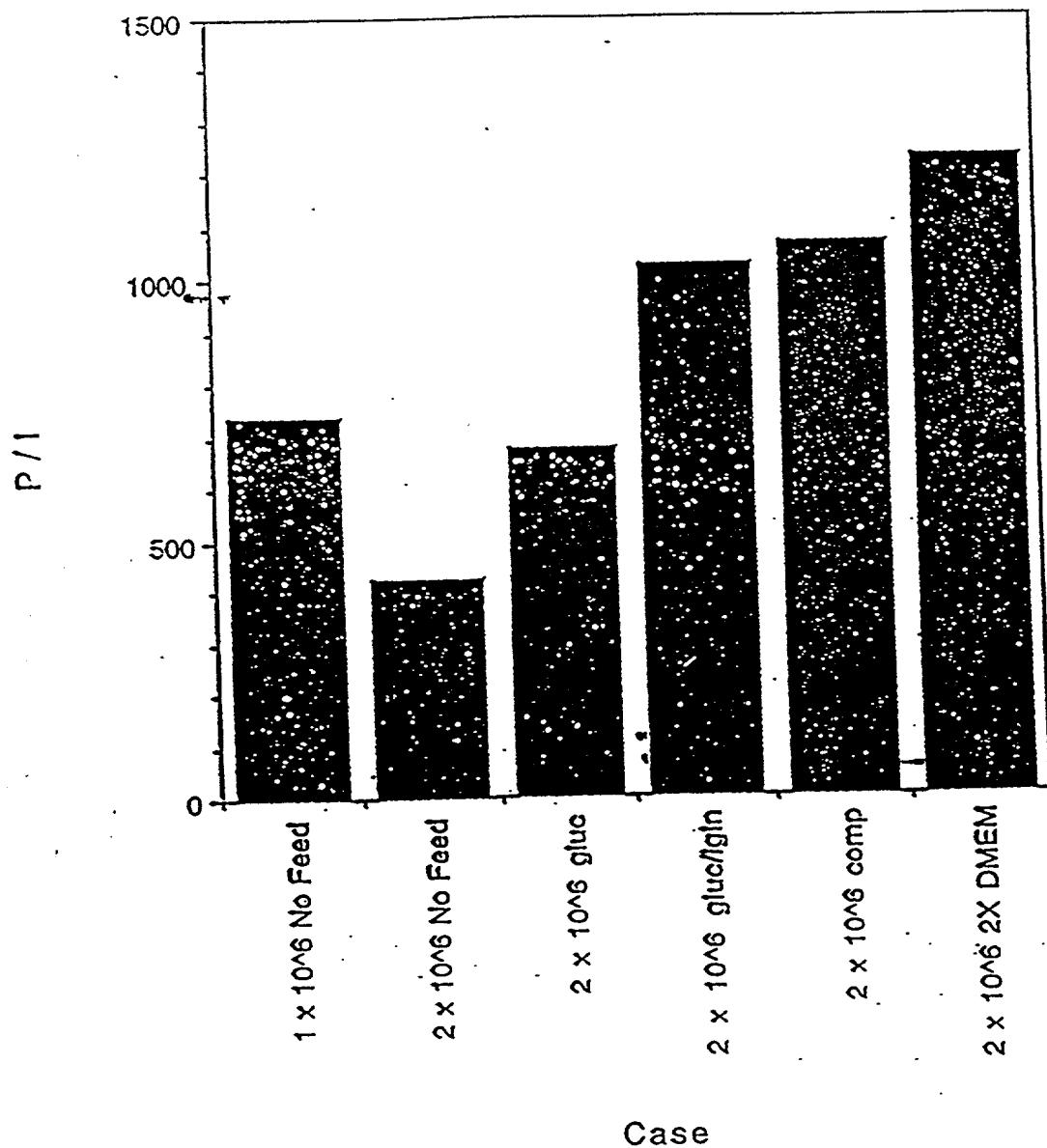


Figure 25

| Lactalbumin Hydrolysate w/Earle's Salts (ELH) | | |
|---|--------------------|-----------------|
| Base Cat No. | 11250 1X Liquid | 11800 Powder |
| Component | mg/L | mg/L |
| INORGANIC SALTS: | | |
| CaCl ₂ (anhyd.) | 200.00 | 200.00 |
| KCl | 400.00 | 400.00 |
| MgSO ₄ (anhyd.) | 97.67 | 97.70 |
| NaCl | 6800.00 | 6800.00 |
| NaHCO ₃ | 2200.00 | - |
| NaH ₂ PO ₄ · H ₂ O | 140.00 | 140.00 |
| OTHER COMPONENTS: | | |
| D-Glucose | 1000.00 | 1000.00 |
| Lactalbumin Hydrolysate | 6500.00 | 5000.00 |
| Phenol Red | 10.00 | 10.00 |

| MEM Amino Acids Solutions ² | | |
|--|------------|------------|
| Base Cat No. | 11136 | 21135 |
| Component | 50X Liquid | 50X Liquid |
| AMINO ACIDS: | mg/L | mg/L |
| L-Arginine | 6320.00 | 6320.00 |
| L-Cystine | 1200.00 | 1200.00 |
| L-Glutamine | - | 14600.00 |
| L-Histidine-HCl-H ₂ O | 2100.00 | 2100.00 |
| L-Isoleucine | 2625.00 | 2625.00 |
| L-Luecine | 2620.00 | 2620.00 |
| L-Lysins HCl | 3625.00 | 3625.00 |
| L-Methionine | 755.00 | 755.00 |
| L-Phenylalnine | 1650.00 | 1650.00 |
| L-Threonine | 2380.00 | 2380.00 |
| L-Tryptophan | 510.00 | 510.00 |
| L-Tyrosine | 1800.00 | 1800.00 |
| L-Valine | 2340.00 | 2340.00 |

References:

1. Eagle, H. (1955) Proc. Soc. Exp. Biol. Med. 89, 362.
2. Eagle, H. (1959) Science 130, 432

| MEM Non-Essential Amino Acids Solution ² | | |
|--|---------|----------------|
| Base Cat No. | 11140 | 100X Liquid |
| Component | mg/L | |
| AMINO ACIDS: | | |
| L-Alanine | 890.00 | |
| L-Asparagine | 1500.00 | |
| L-Aspartic | 1330.00 | |
| L-Glutamine | 1470.00 | |
| Glycine | 750.00 | |
| L-Proline | 1150.00 | |
| L-Serine | 1050.00 | |

| MEM Vitaminon Solutions ² | | |
|--------------------------------------|---------|------------|
| Base Cat No. | 11120 | 50X Liquid |
| Component | mg/L | |
| NaCl | 8500.00 | |
| D-Ca Pantothenate | 100.00 | |
| Choline Chloride | 100.00 | |
| Folic Acid | 100.00 | |
| I-Inositol | 200.00 | |
| Nicotinamide | 100.00 | |
| Pyridoxal-HCl | 100.00 | |
| Riboflavin | 10.00 | |
| Thiamine HCl | 100.00 | |

Figure 26

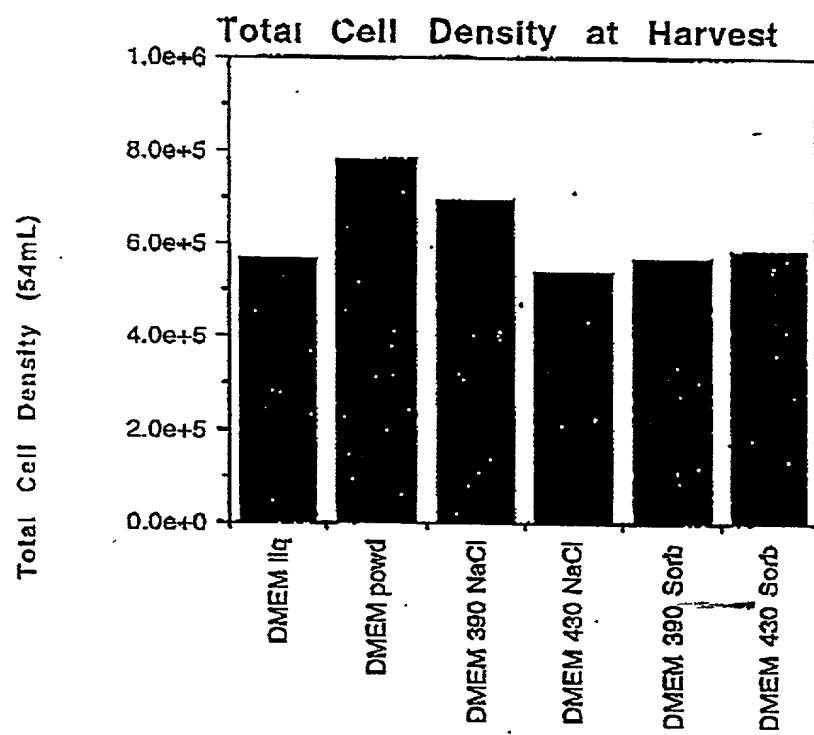


Figure 27

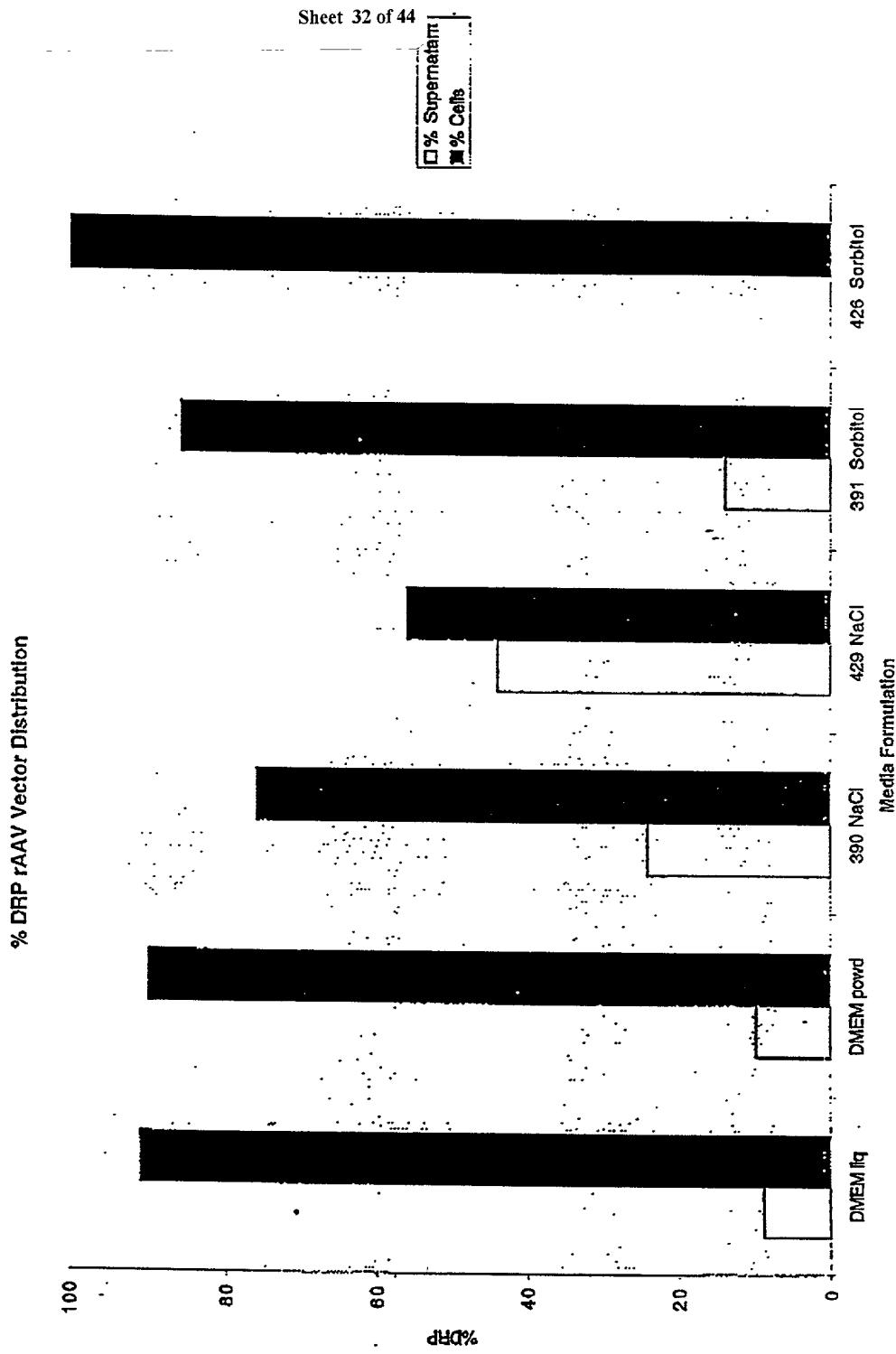


Figure 28

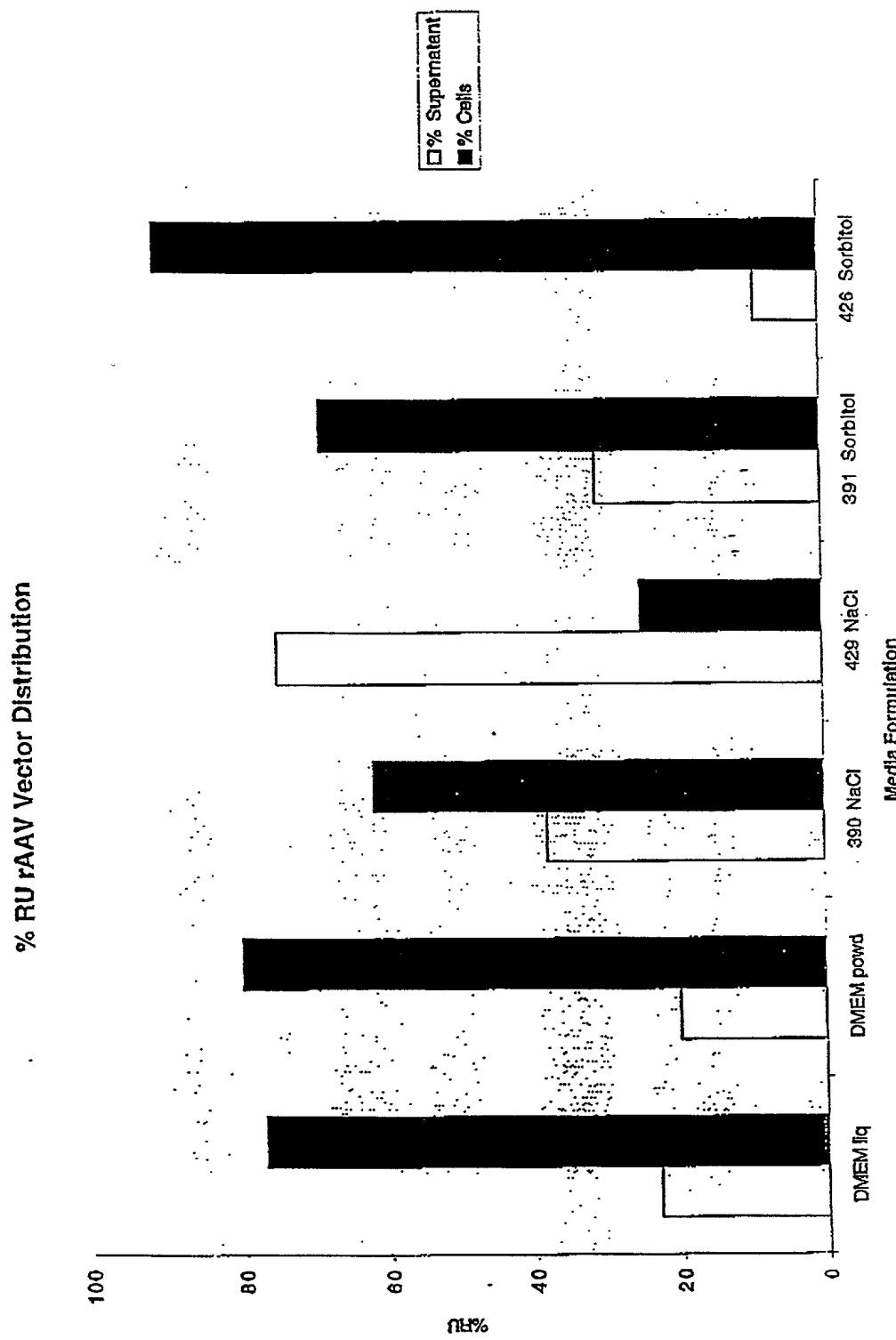


Figure 29

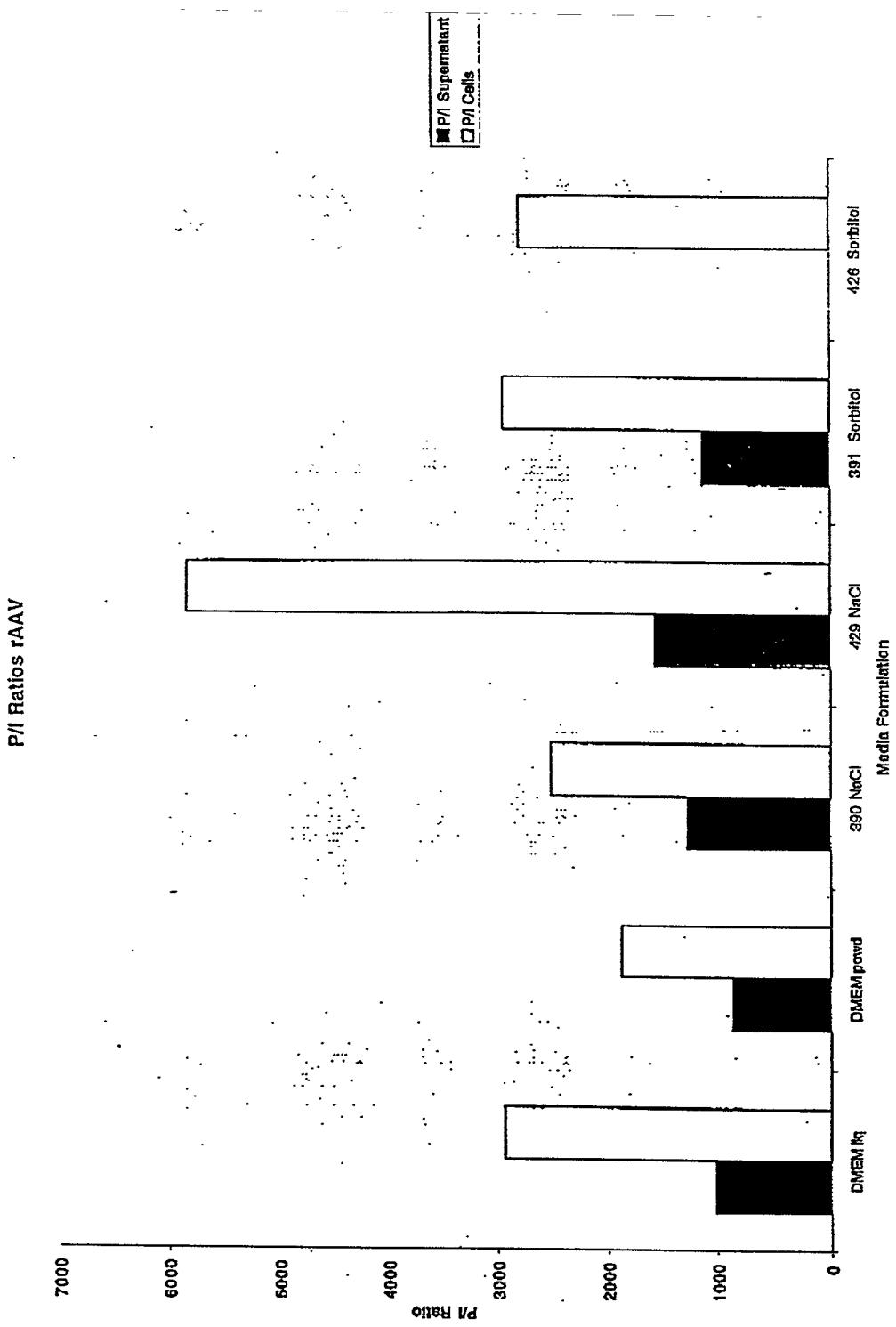
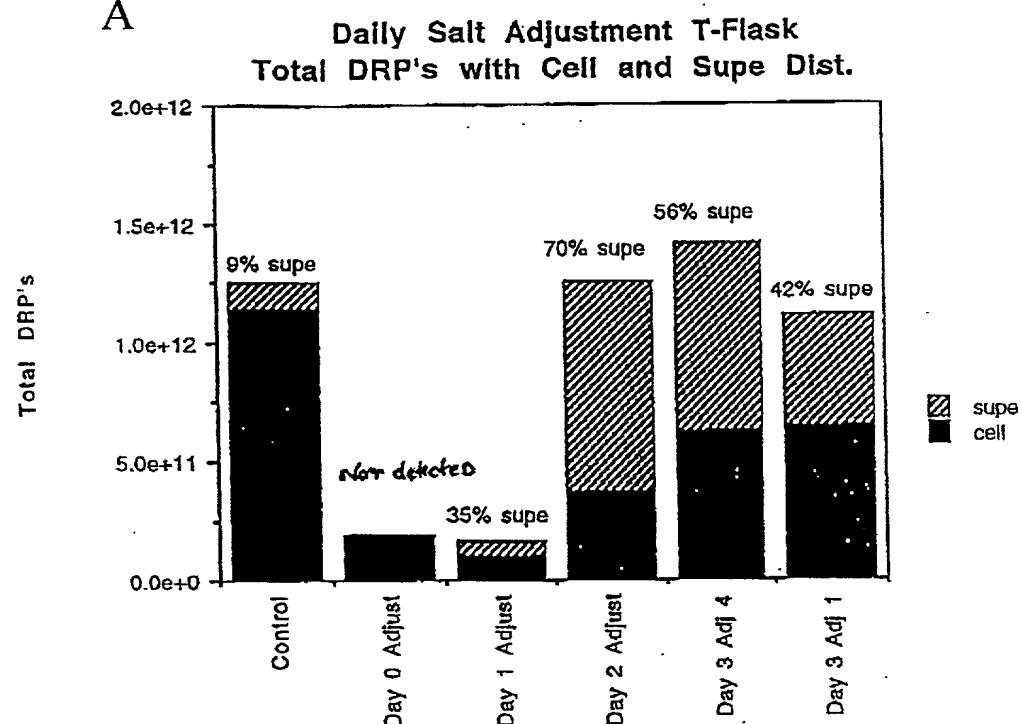


Figure 30

A



B

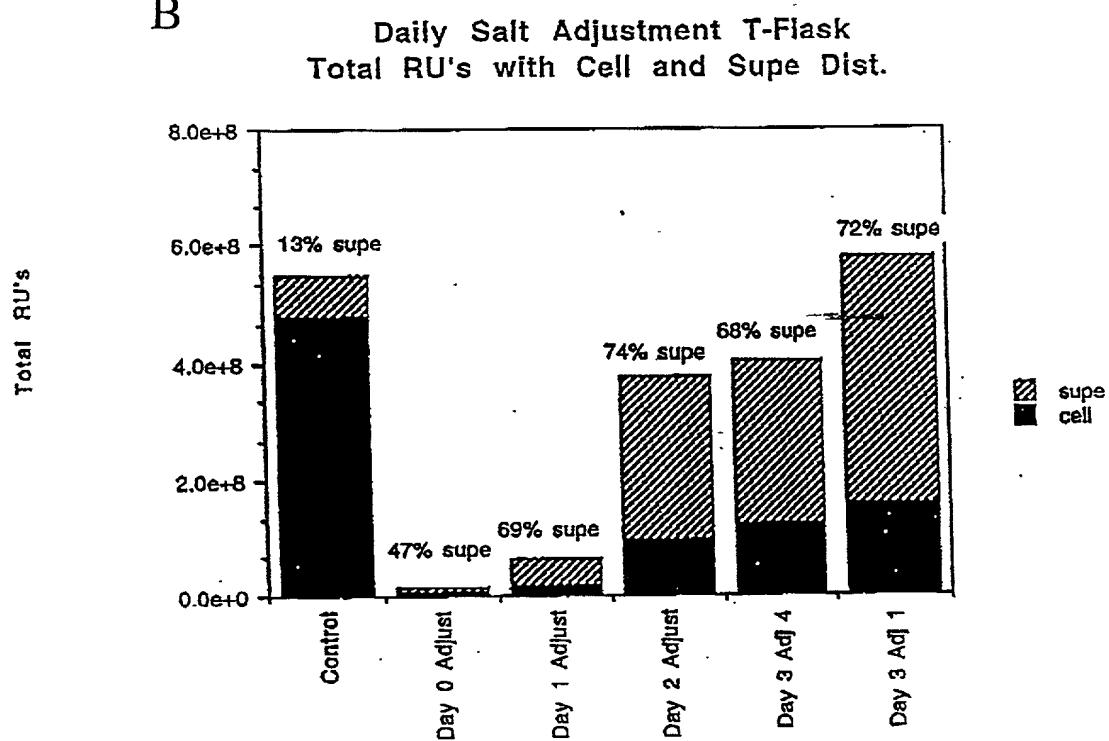


Figure 31

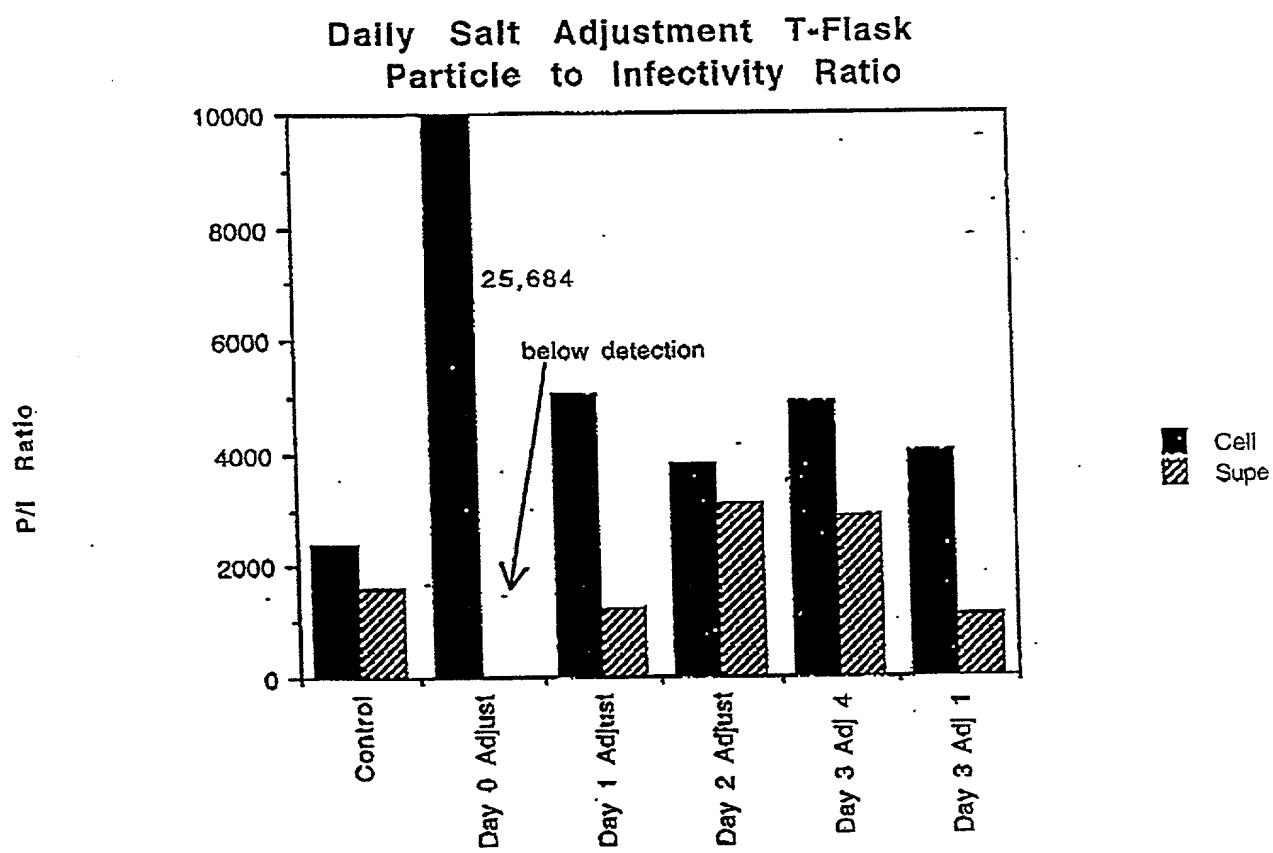
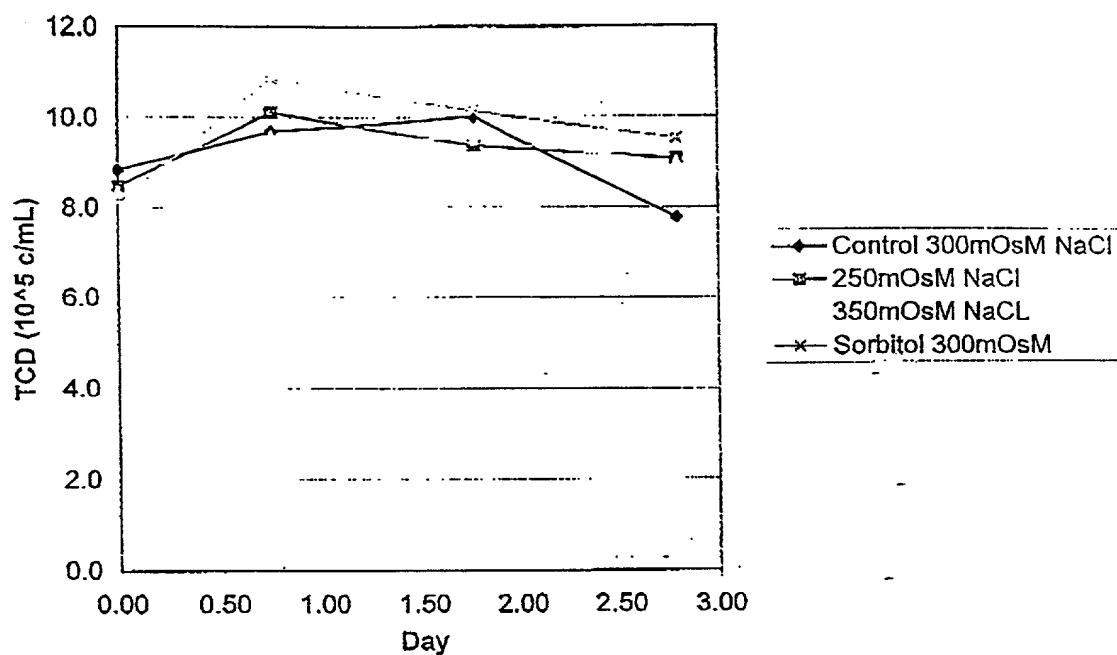


Figure 32

A

Total Cell Density



B

Total Cell Density

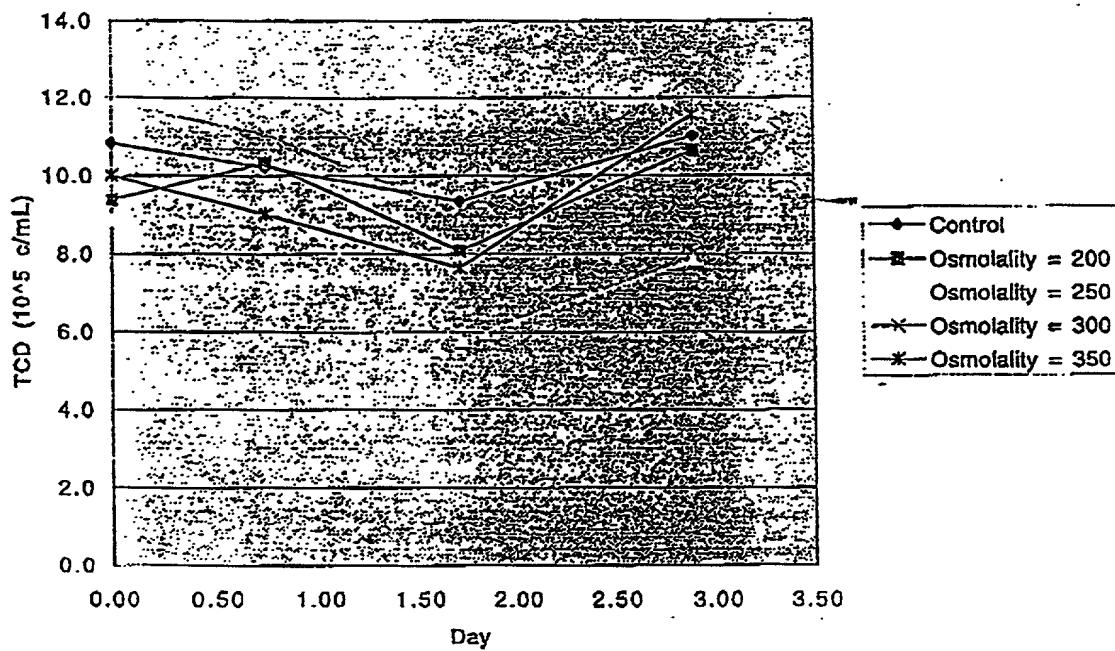
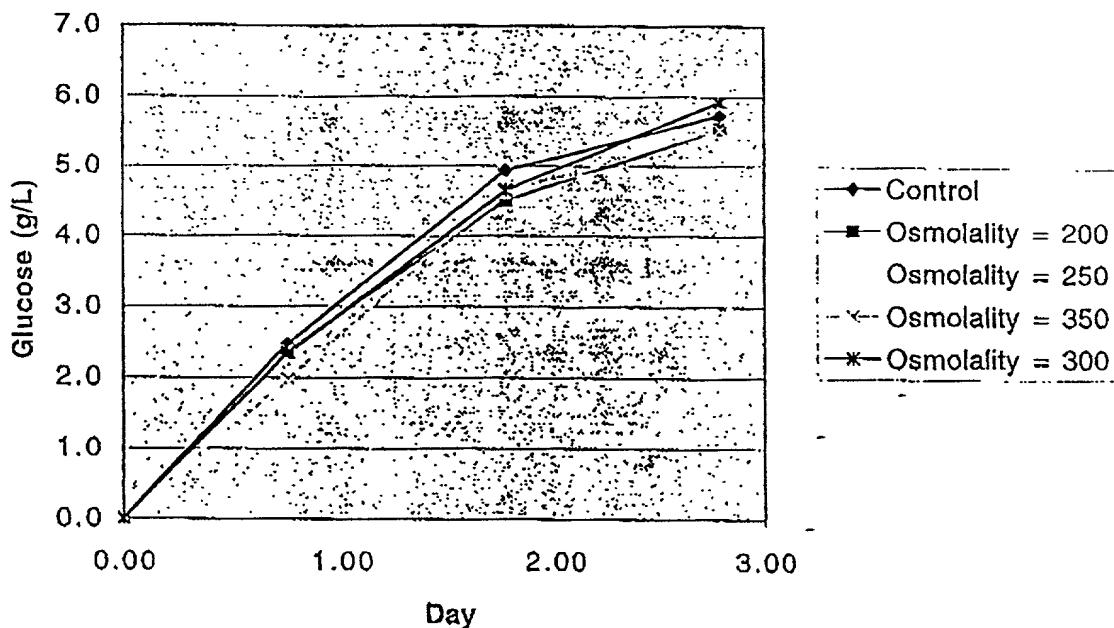


Figure 33

A

Cumulative Glucose Consumed



B

Cumulative Glucose Consumed

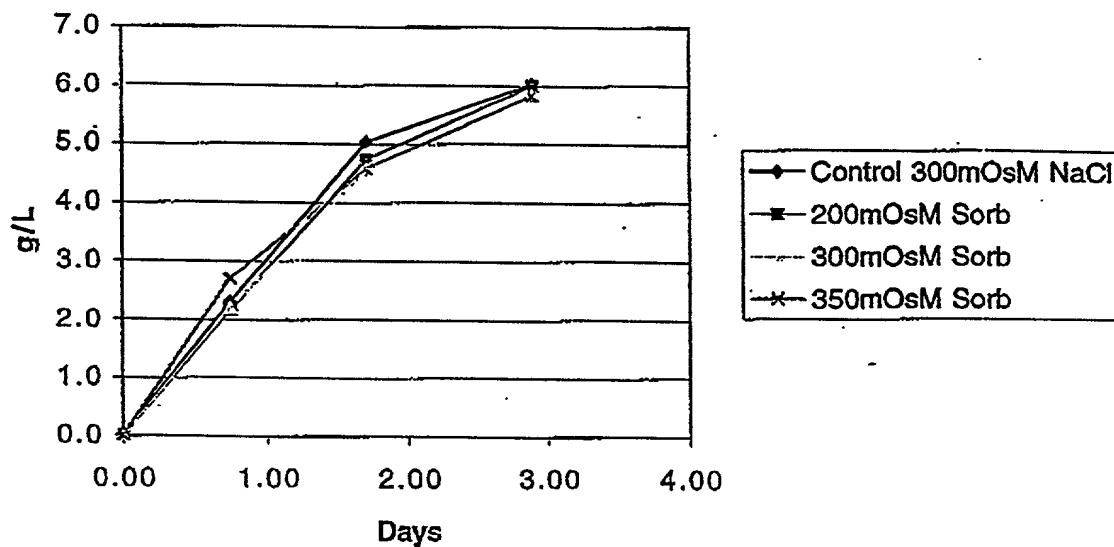
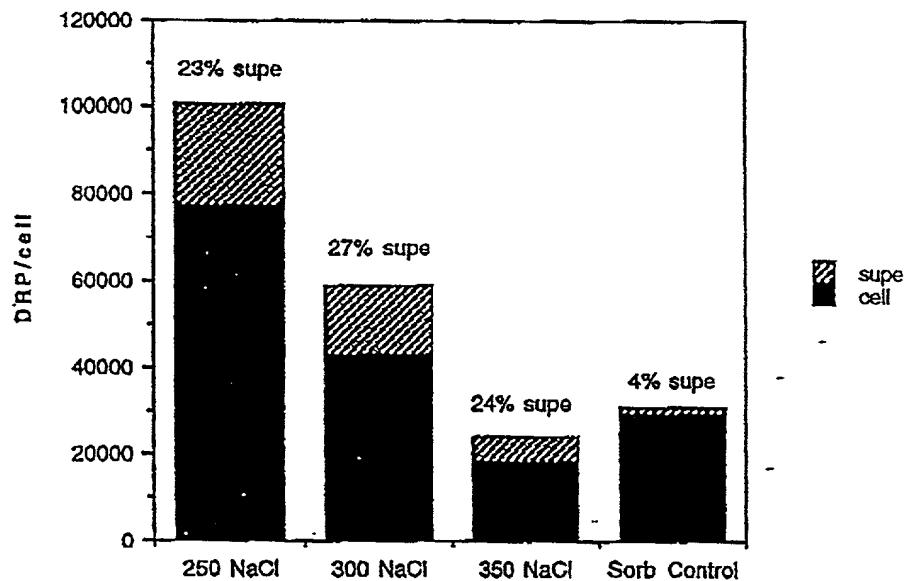


Figure 34

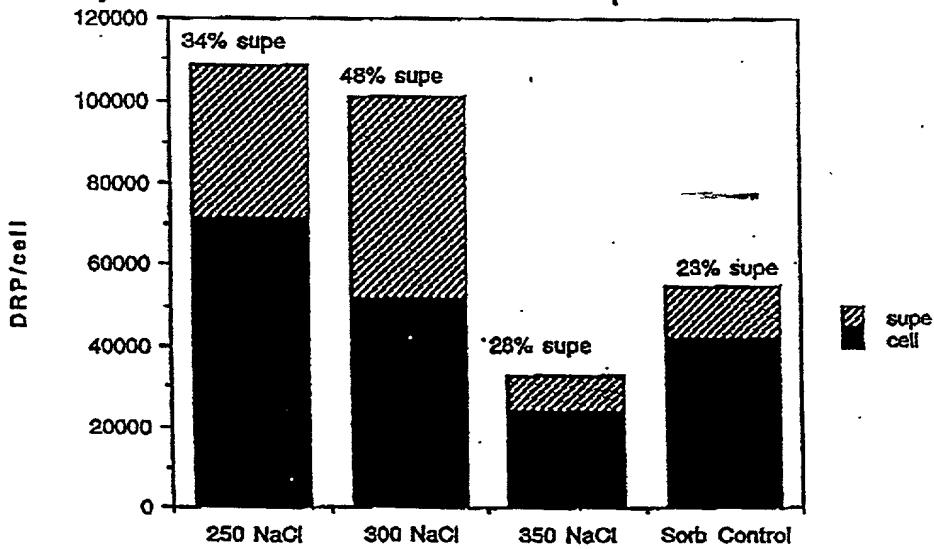
A

Bioreactor Osmolality Experiment (NaCl)
Day 2 DRP/cell with Cell and Supe Distribution



B

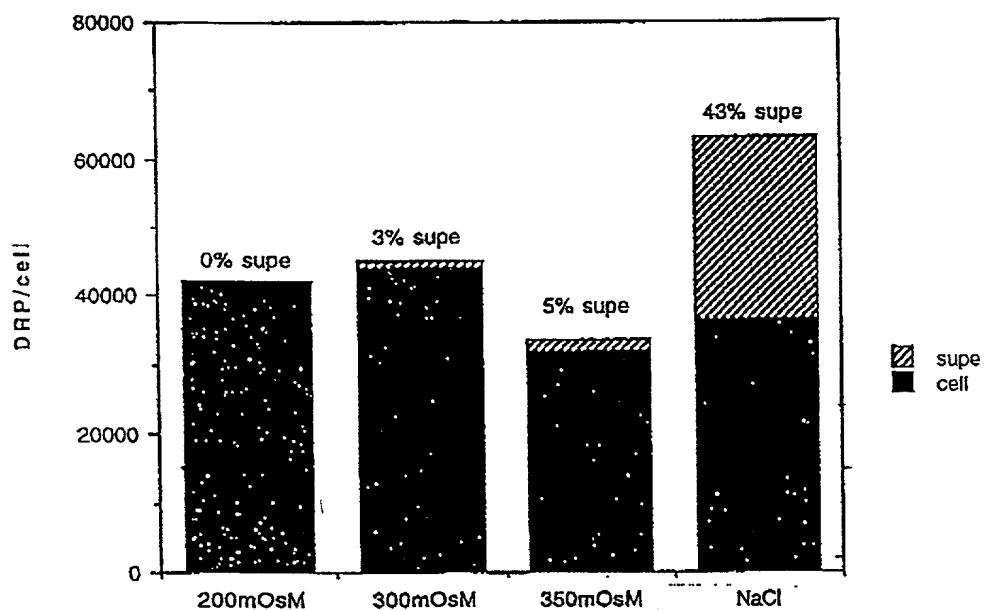
Bioreactor Osmolality Experiment (NaCl)
Day 3 DRP/cell with Cell and Supe Distribution



Figures 35A and 35B

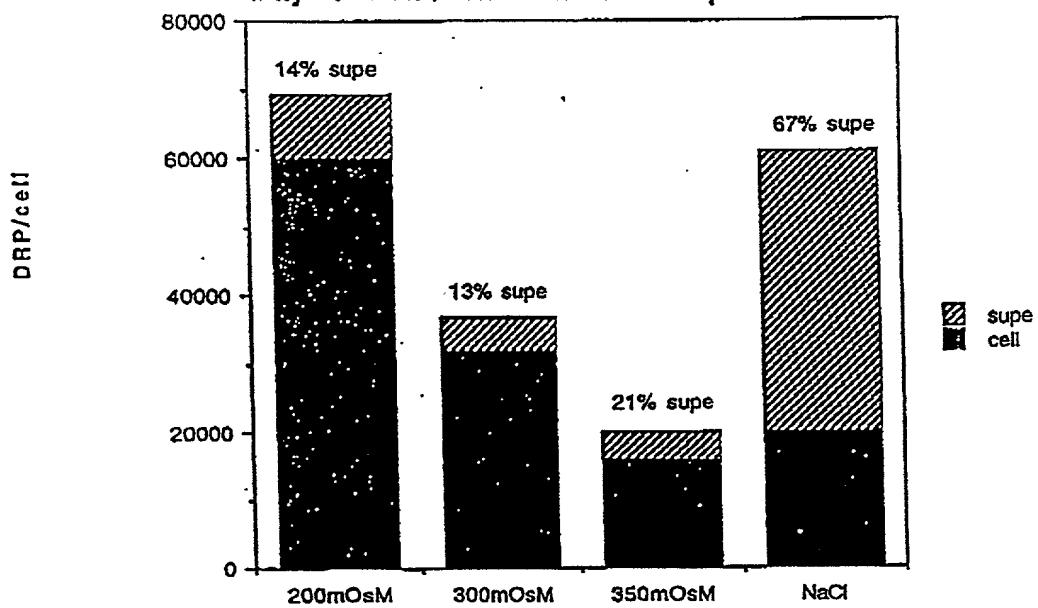
C

Bioreactor Osmolality Exp. (Sorbitol)
Day 2 DRP/cell Cell and Supe Distribution



D

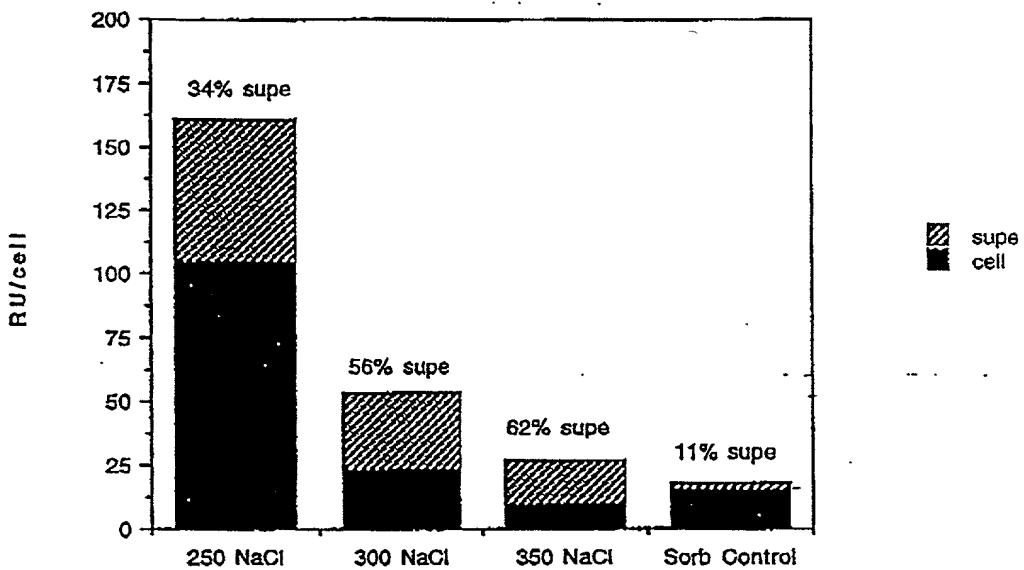
Bioreactor Osmolality Exp. (Sorbitol)
Day 3 DRP/cell Cell and Supe Distribution



Figures 35C and 35D

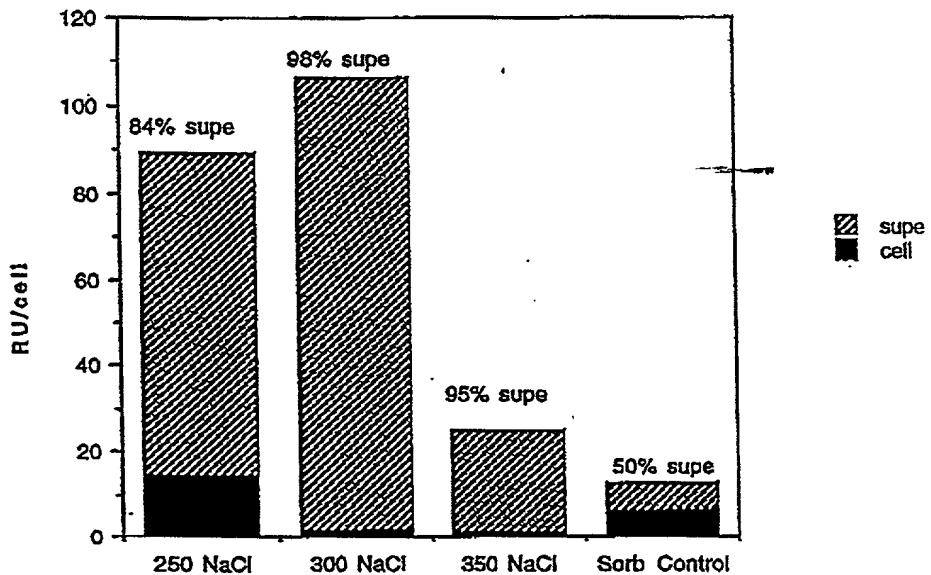
A

Bioreactor Osmolality Experiment (NaCl)
Day 2 RU/cell with Cell and Supe Distribution



B

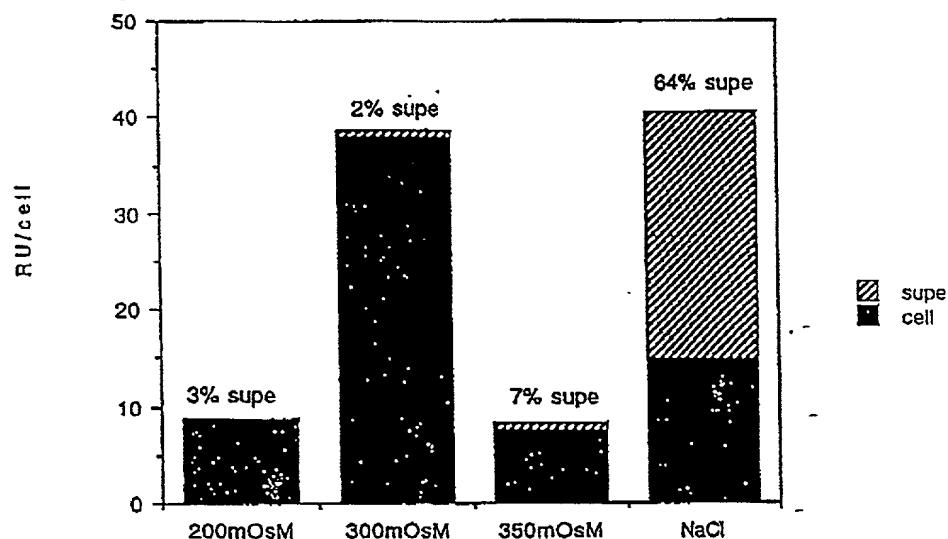
Bioreactor Osmolality Experiment (NaCl)
Day 3 RU/cell with Cell and Supe Distribution



Figures 36A and 36B

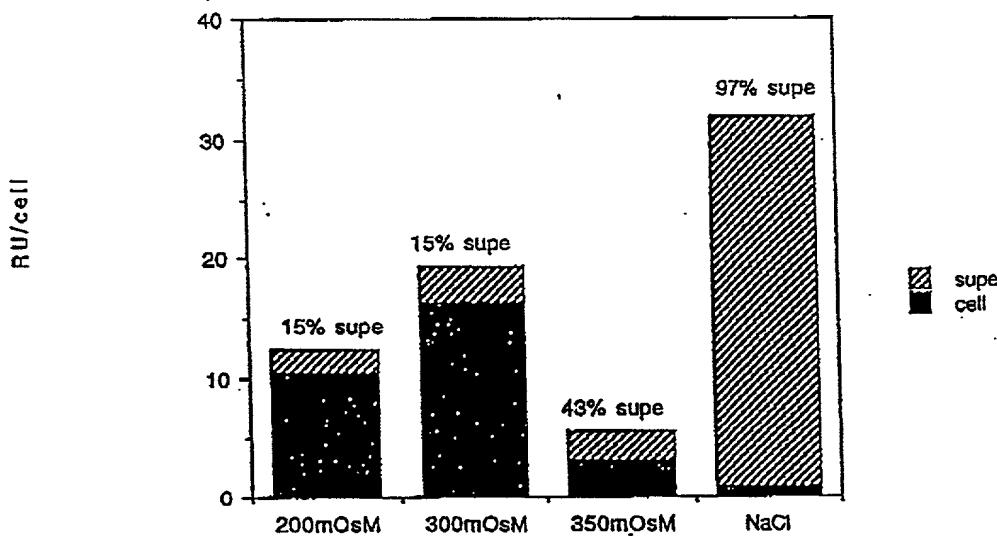
C

Bioreactor Osmolality Exp. (Sorbitol)
Day 2 RU/cell with Cell and Supe Distribution



D

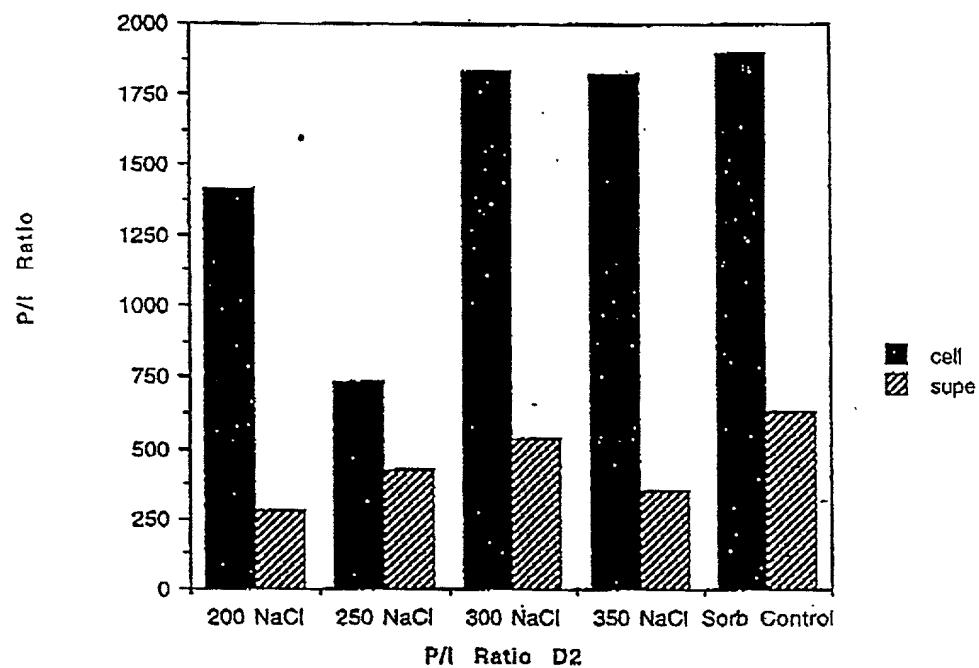
Bioreactor Osmolality Exp (Sorbitol)
Day 3 RU/cell with Cell and Supe Distribution



Figures 36C and 36D

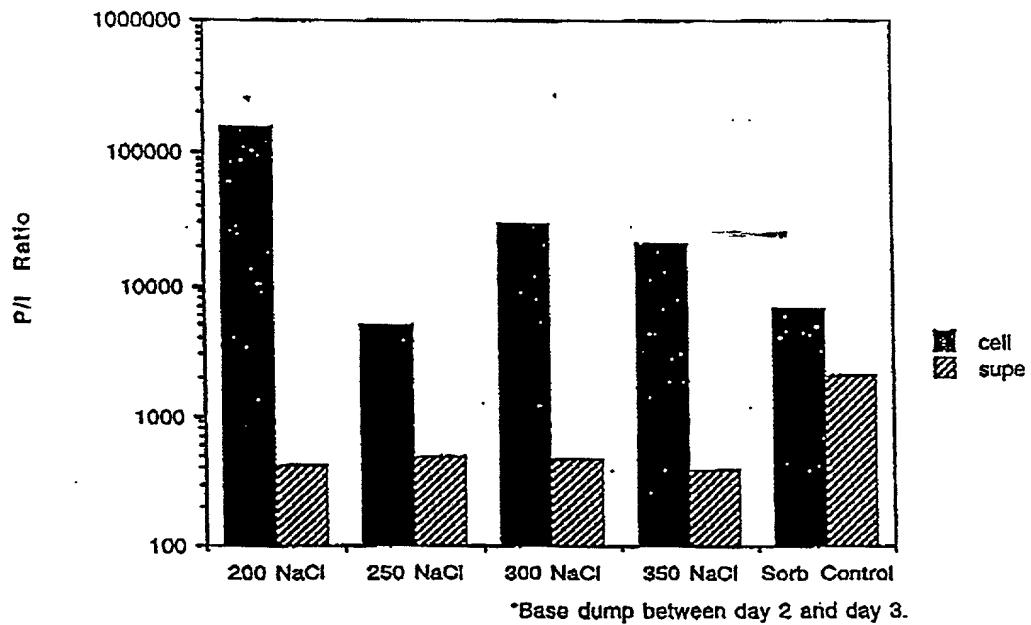
A

Bioreactor Osmolality Experiment (NaCl)
Day 2 Particle to Infectivity Ratio



B

Bioreactor Osmolality Experiment (NaCl)
Day 3 Particle to Infectivity Ratios

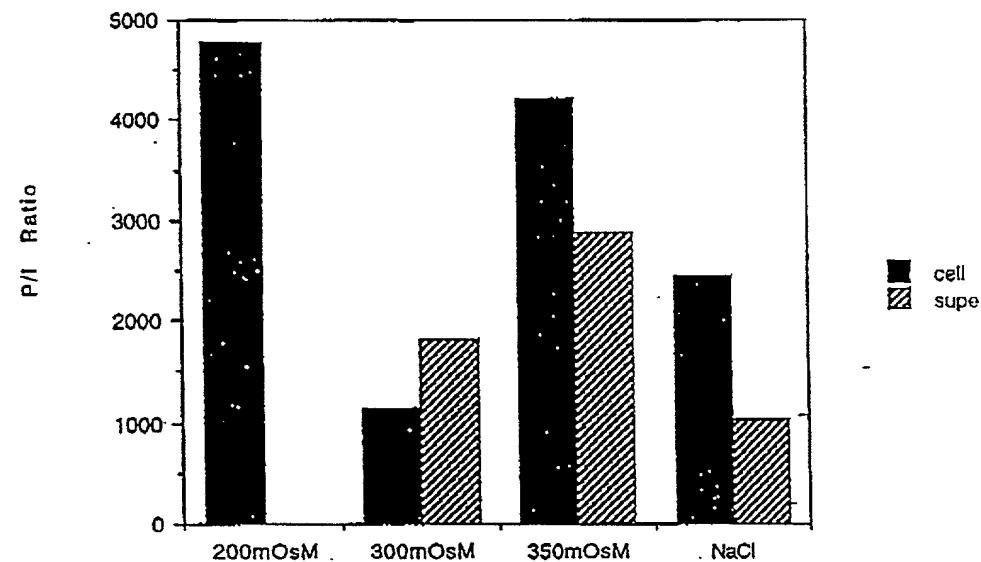


*Base dump between day 2 and day 3.

Figures 37A and 37B

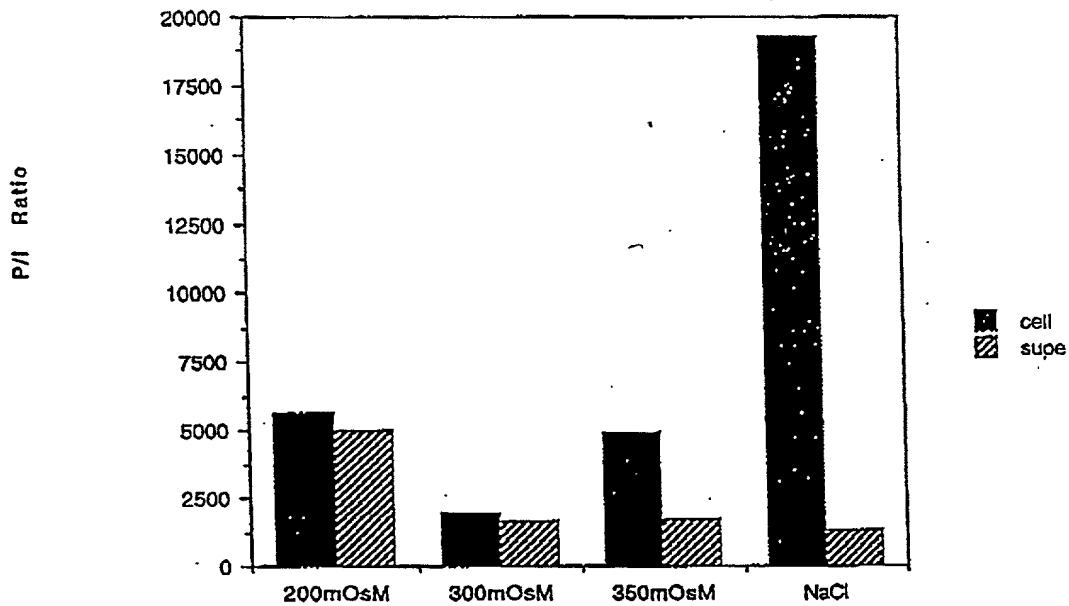
C

Bioreactor Osmolality Exp. (Sorbitol)
Day 2 Particle to Infectivity Ratio



D

Bioreactor Osmolality Exp. (Sorbitol)
Day 3 Particle to Infectivity Ratio



Figures 37C and 37D